

INITIAL REPORT

Sustainability Committee of the  
Japanese Garden Advisory Council

PLANNING FOR THE FUTURE OF  
THE SEATTLE JAPANESE GARDEN

October 3, 2012



## TRANSMITTAL

Attached for JGAC's consideration, review, possible modification and ultimate approval is the Initial Report of your Japanese Garden Sustainability Committee.

The Sustainability Committee, instigated by Christopher Williams, Acting Superintendent of Seattle Parks and Recreation, was formed to consider two matters: (1) future capital projects and enhancements to operations, and (2) the optimal operating model for managing the Seattle Japanese Garden going forward.

The Japanese Garden Society received a \$257,000 bequest from Seattle Japanese Garden volunteer Barbara Williams. The Japanese Garden Society committed to seek consensus from other entities operating and supporting the Japanese Garden with regard to the best use of these funds.

It is the Japanese Garden Society's stated desire to use this bequest to make a lasting difference for the Seattle Japanese Garden.

This Report is the result of 5 months of studies where your Committee considered a wide range of needs, projects and possibilities.

Potential projects and activities have been described and prioritized as a part of this Report.

The Sustainability Committee welcomes the Advisory Council's input. With the Advisory Council's acceptance of the Committee's Report, the Report will then be submitted to Parks for Next Steps as described in the Report.

As an immediate step, the Sustainability Committee invites the Advisory Council to participate with the Committee to fund the \$6,825 Pond Restoration study.

Respectfully submitted,

***Steve Garber***

For the Japanese Garden Sustainability Committee

# Japanese Garden Sustainability Committee

## Initial Report

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# Japanese Garden Sustainability Committee

## Japanese Garden Advisory Council

### Initial Report

#### BACKGROUND and CURRENT STATUS

The Seattle Japanese Garden is a 3.5 acre Seattle city park managed by Seattle Parks and Recreation and supported by several entities with a moderate degree of cooperation and focus.

The Seattle Japanese Garden (SJG) is part of Washington Park and the Washington Park Arboretum. Washington Park Arboretum is an entity operated cooperatively by the Arboretum Foundation, Seattle Parks, and the University of Washington under the umbrella of the Arboretum Botanical Garden Committee, an entity created by the Washington state legislature in the 1930s when the Arboretum was established.

As a practical matter, the University of Washington and the Arboretum Botanical Garden Committee have almost no involvement in the Japanese Garden with the one exception of the Miller Library at the UW's Center for Urban Horticulture which serves as the repository for certain of the Japanese Garden's artifacts.

One principal SJG support group is the Japanese Garden Advisory Council (JGAC). JGAC is a unit of the Associated Recreation Council (ARC), a broadly supported 501(c)(3) charitable organization. ARC partners with Seattle Parks and Recreation to provide community support for activities in a number of Seattle city parks including the Seattle Japanese Garden.

Another principal SJG support group is Unit 86 of the Arboretum Foundation. The cultural attributes of the Garden – the festivals, education – would hardly exist but for the members of Unit 86. While Unit 86 provides volunteers for a number of activities in the Japanese Garden, its largest effort is to train and provide guides for tours of the garden.

As to paid staff, SJG has two full time Parks gardeners plus seasonal help; three part time cashiers; and a half time Parks person plus a half time ARC person both of whom provide administrative services and support for various activities and events. Parks Shops provides approximately 1,500 hours of annual maintenance as needed. Unit 86 has no paid employees. JGAC, Unit 86 and others provide thousands of volunteer hours to the Garden annually.

An additional support organization, the Japanese Garden Society (JGS), an independent 501(c)(3) organization established in 1985, is a predecessor of the JGAC. JGS has been largely dormant since about 2004, although it is still in existence.

In 2011, the Japanese Garden Society received a \$257,000 unrestricted bequest from its one time volunteer Barbara Williams. In accordance with its bylaws, JGS will use this money in support of the Seattle Japanese Garden. JGS is committed to making a lasting difference to the future of the Seattle Japanese Garden with this bequest.

To that end, on January 23, 2012, President of the Japanese Garden Society, Steve Garber, met at the invitation of and with Seattle Parks Acting Superintendent Christopher Williams and members of his Department. At that meeting, Christopher Williams proposed and Steve Garber agreed as follows (as reported in the notes of that meeting):

- Christopher Williams does not support using the Barbara Williams Bequest only for Seattle Japanese Garden operations.
- Christopher Williams does support using the Barbara Williams Bequest for capital improvements to the Seattle Japanese Garden and requested Parks Division Director Dan Johnson to provide a list of potential capital project ideas.
- Christopher Williams would support a feasibility study to determine the optimal operating model for the Seattle Japanese Garden.

## PARTICIPANTS

Subsequent to the January meeting, JGAC formed this Sustainability Committee (the Committee) whose six members include two from JGAC, two from JGS and two from Unit 86 who are as follows:

- Steve Garber, President, JGS and Chair of this Committee
- Karen Lightfeldt, Vice President, JGS
- Christopher Ezzell, Member, JGAC
- Bruce Robb, Member JGAC
- Myrna Aavedal, President, Unit 86
- Mary Ann Cahill, Member, Unit 86

In fact, various of those on this Committee are members of two and sometimes all three of these organizations, but the above list indicates their representation on this Committee.

Collectively and cumulatively, the Committee members have been involved with the Japanese Garden for some number of decades and in a number of capacities. All serve as unpaid volunteers in this and any other role they currently hold with regard to the Japanese Garden.

In addition, Peggy Garber, Treasurer of JGS, has functioned as the Recorder of the Sustainability Committee meetings, and her Meeting Notes document the work of this Committee and support the findings and conclusions of this report.

As suggested in the January Meeting Notes referenced above, Dan Johnson, Director of the Parks Division of Seattle Parks and Recreation, has participated in the Committee's proceedings representing Parks. Dan's participation is greatly appreciated.

As a starting point, the Committee used the Capital Projects List compiled by Parks Horticulturalist Lisa Chen and JGAC Member Jack Rafn (a copy of which is attached to this report). The Committee is exceedingly grateful for the thought given to and the detail provided in this document.

Other Parks participants in the Committee's activities have included:

- Michael Shiosaki, Director, Planning and Development
- Andy Sheffer, Senior Project Coordinator, Planning and Development
- Sue DeNure, Japanese Garden Senior Gardener
- Lisa Chen, Park Horticulturalist

The work of this committee was greatly enhanced by the contributions and cooperation of each of these participants. That said, this report and the conclusions and priorities herein are the Committee's and Committee's alone. Any errors, omission or misstatements are the Committee's.

## MATTERS OF SUSTAINABILITY

The Committee took its cue from Christopher Williams and focused on sustainability (hence the Committee's name). To begin our work, we agreed that sustainability needs to have both current and future components.

Essentially, we functioned as a long range planning committee focusing on two goals:

- Enhancements of infrastructure to best assure the Garden's quality, Japanese authenticity and overall longevity.
- Improvements of functional and operational activities to enhance the public knowledge and experience of the Garden and monetary contributions to the Garden with the goal of increasing patronage and revenue to the point of producing a self-sustaining income stream sufficient to cover operational expenses as well as capital outlays.

The Committee did not base its deliberations on the availability of funds, but rather on the needs of the garden and the potential benefits that could be achieved. To that end, the Committee identified 35 projects, areas and tasks arrayed in the following categories:

- Maintenance of grounds and infrastructure
- Improvements of existing facilities
- Operations
- Future projects



The Committee's inquiries were broadly stated:

- What do we have?
- What kind of shape is it in?
- Who's doing what?
- Who's paying for what?
- What ought we be doing?
- What are our priorities?
- How can we take all of this into account and create a plan to make the garden more sustainable for the near term and into the future?

For our purposes, we agreed that sustainability required meeting the needs of the present while anticipating the needs of the future and providing avenues for those who follow us to meet their own needs.

Put another way, our focus was on the future while remaining mindful that we could hardly ignore the present lest those issues become greater problems in the future.

### PRELIMINARY STUDIES

Committee members participated during this year with various Parks personnel in a number of studies, typically of the Walkabout variety during which notes were taken. The Committee also relied on various studies completed in recent years, some of which Committee members participated in. These include:

- A March 2012 Capital Projects Walkabout focused on the Chen/Rafn capital projects list.
- An acoustical engineer who took sound readings in the Garden to measure the impact of noise from Lake Washington Boulevard.
- A Walkabout report conducted by Marc Keane regarding the roji.
- A separate Pond Assessment Walkabout with John Fulford of Turnstone Construction.

- Several assessments of the condition and quality of the Machiai including an estimate for replacing the roof.
- Inquiries and investigations regarding repaving Lake Washington Boulevard.

## PRIORITIES

We prioritized the 35 matters we addressed into Low, Medium, High and Very High priorities, looking at both present conditions and future needs. We arrived at four Very High priorities which are (in alphabetical order):

- Noise abatement on Lake Washington Boulevard – cost estimate \$140,000.
- Publicity, marketing and branding the garden to increase awareness, attendance and thus revenue – cost not yet determined.
- Remediation of the pond bank, particularly around the two islands – cost estimate for the restoration to be produced as part of a study described under Next Steps below.
- Signage and the presentation of the Entry Gatehouse and adjacent grounds – cost of study not yet determined; cost of signage should be modest.

The Committee realizes that none of these items exist in a vacuum.

For example, while we consider remediating pond bank erosion as a Very High priority and removing the sediment from the pond as only a Medium priority, the sensible approach is to drain the pond only once and do both projects at the same time. Other future efforts will almost certainly combine tasks of varying priorities in the pragmatic interest of efficiency and to minimize costs.

In a similar manner as the ponds projects, various related projects are grouped on pages six and seven of the Projects Matrix that they may be considered together.

This Committee attempted to look into the future at what we ought to be doing going forward to assure the best physical and financial health of the Seattle Japanese Garden. Once we have established priorities, we can determine timelines and then look to where we can find financing to do what we agree we ought to be doing.

Without priorities how can we plan? With sustainability as a goal, priorities are the end product of this report.

### NEXT STEPS

The Committee intends to support the pond assessment. Andy Sheffer of Parks has worked with Turnstone Construction with regard to a proposed study of the pond project. Turnstone has submitted a proposal (a copy of which is attached) to do this work this autumn for \$6,825.

The Committee expects that another next step will be the study and determination of an Optimal Operating Model. The Committee anticipates that completion of all but the most immediate tasks described in this report and the attached Project Analysis Matrix will follow from (rather than precede) the findings and recommendations of that study. The cost of this will be borne equally by the Japanese Garden Society and Parks.

### JAPANESE GARDEN SOCIETY COMMITMENTS

The Committee recommends that an engineering and habitat study of the pond be undertaken to determine how best to go forward with the pond restoration and preservation.

The Japanese Garden Society has informed the Committee that the JGS is ready to commit an amount in the range of \$10-20,000 to

immediate needs as identified in the Matrix, specifically to include this pond study.

The Japanese Garden Society notes that it does not expect to be the sole financial source for anything of any significant cost. Specifically and most immediately, JGS has informed this Committee that JGS will commit to pay up to one-half the cost of the pond restoration study.

The Japanese Garden Society, as it agreed with Christopher Williams, will commit another \$10-15,000 as its half of the cost of a study of the Optimal Operating Model as soon as a consultant agreeable to both Parks and JGS can be chosen. This Committee expects that study to commence before year end.

The Japanese Garden Society informs this Committee that JGS will commit the balance of its funds to various projects once the Optimal Operating Model study has been completed and accepted, and, it is anticipated, in accordance with the findings and recommendations of that study. JGS has no self-imposed deadline for disbursing all its funds.

### A FINAL WORD

The Committee and all its members thank the Advisory Council and Parks for the opportunity to embark on this task. We are grateful for both the remarkable talent residing in Seattle Parks and the generous cooperation of all the people named in this report.

Finally, as always and speaking for each member of this Committee, we do love the Seattle Japanese Garden.

Attachments: Project Analysis Matrix  
Chen-Rafn Capital Projects list  
Turnstone Construction pond restoration proposal

**PRIORITIES WITHIN AREAS**

Project	Description	Sustainability Benefits		Projected Cost	Comments		Sustainability Priority
		Physical	Financial		Pros	Cons	
Alternate Management & Operating Agreement	Determine "Optimal Operating Model" and make recommendations to implement	Should produce most and quickest enhancements to the garden	Move the garden toward true sustainability (however operated)	Parks agrees to share cost. Our half probably \$10-15,000	All parties agree that the garden should strive to operate in an optimal way.	There are many parties involved in the management of the garden, and any significant change will be difficult to agree upon and will likely cause some valued supporters to fall away.	Part of the deal
<b>Maintenance of Grounds and Infrastructure</b>							
Pond bank	Repair erosion damage, particularly to Turtle Island and the island between the two bridges	Keep essential Japanese garden components from disappearing	Avoid greater repair costs down the road	Parks Estimate \$200-250 K	High aesthetic value. If done properly, long term benefit, potentially a decades long fix.	Half measure (arguably like 2002) will not have lasting value. Significant cost.	Very high
Harbor stone steps	Raise west path where puddles form, mark steps for safety.	Enhanced visitor experience	Unpleasant experience discourages repeat attendance.	Very little	Protect surrounding plantings from being trampled as people avoid the puddle.	May present ADA issues.	High
Hire specialty staff (e.g. Masa)	Skilled Japanese gardeners for pruning, candling, new plantings and removal of existing plants & other specialized tasks	Necessary tasks to maintain garden to an appropriate standard	A better looking garden will attract more visitors.	Historically, \$10-20,000 per year depending on needs	Some tasks and maintenance must be performed by highly skilled workers.	Cost. May not be able to do as much high end maintenance as would be ideal.	High
Machiai roof	Replace deteriorated wood roof both because a new roof is needed and to protect structure from water damage.	Prevent continued deterioration of entire structure	Cheaper to repair now than to replace later.	Parks Estimate \$15-20 K	Repair now is smarter and cheaper than replace later. Machiai is an essential part of the teahouse experience.	Can be difficult to do appropriately, e.g. by a skilled carpenter in Japanese carpentry.	High
Tea House structure	Maintenance and prevention of deterioration from mold and mildew during cold wet months	The garden is unimaginable without a useable teahouse.	The teahouse is an important part of attracting the public to the JG.	The cost of sufficient fans or heaters and proper ventilation would be minimal.	This is basic maintenance. If the structure became unusable, it would be a huge loss.	Somebody, presumably a gardener but maybe a cashier, would have to monitor this maintenance.	High
Hire seasonal staff and/or interns	Provide more and better garden maintenance	Enhanced visitor experience	A better looking garden will attract more visitors.	Not a lot, but could be an annual cost.	Much maintenance can be performed by relatively lower paid workers.	Cost. May not be a high enough priority.	Medium

**PRIORITIES WITHIN AREAS**

Project	Description	Sustainability Benefits		Projected Cost	Comments		Sustainability Priority
		Physical	Financial		Pros	Cons	
Machiai structure	Preservation or replacement of the waiting station in the outer garden of the tea garden.	A machiai is a critical element to the way of tea - chado	The teahouse is an important part of attracting the public to the JG.	Re-roof - \$15-35,000 depending on materials. Replace - \$40-50,000	Machiai is an essential part of the teahouse experience.	Can be difficult to do appropriately, e.g. by a skilled carpenter in Japanese carpentry.	Medium
Pond circulation pumps	Improve water quality (i.e. pH and oxygen) via improvements in filtration and aeration	Keep koi, turtles, various other critters, plants & pond healthy	Maintaining health of the garden maintains public interest & attendance and, done properly, decreases maintenance costs over	Parks Estimate \$200-220 K (however the pumps themselves aren't	Koi are a great draw for the public, especially children	Expensive for what you get? Past systems have not worked.	Medium
Pond sediment	Remove sediment from the pond to restore depth needed by the koi.	Keep koi, turtles, various other critters, plants & pond healthy	Maintaining health of the garden maintains public interest & attendance and, done properly decreases maintenance costs over	Parks Estimate \$75-100 K	Adequate depth may be critical to the health and reproductive ability of koi.	May not yet need to be done.	Medium
Roji maintenance	Increase maintenance of roji grounds, perimeters and gates	Without high level of maintenance, area becomes merely ordinary	The area around the teahouse is an important part of attracting the public to the JG.	Not a lot, but could be an annual cost.	The difference between basic maintenance and excellent maintenance is the difference between ordinary and extraordinary.	Increases demands on the gardening staff.	Medium
Front gate security	Prevent intruders from scaling the front gate.	Prevent vandalism to garden. Important to morale of staff.	Everything that discourages damage to the garden is helpful.	Design Est. \$7-8 K Construction \$12-15 K	We don't want to encourage after hour visitors.	Could cost more than it is worth. May just move the problem. May present invasion of privacy issues.	Low
Harbor stone stairs	Repair/rebuild middle steps to upper path	Safety issue	A better looking garden will attract more visitors.	Parks Estimate \$75 K (which is surely way too high)	Stairs should be more attractive. They look under cared for.	May present ADA issues.	Low

**PRIORITIES WITHIN AREAS**

Project	Description	Sustainability Benefits		Projected Cost	Comments		Sustainability Priority
		Physical	Financial		Pros	Cons	
<b>Improvements</b>							
Road noise abatement	Install quiet paving along Lk Wash Blvd next to garden	Enhanced visitor experience	A quieter garden will attract more visitors.	Maybe \$125,0000. Cost may be shared with others, including WSDOT.	Important to visitor, staff and volunteer morale.	High cost for something maybe not that effective and maybe not that long lasting.	Very high
Signage & Entry Gatehouse appearance & visual message to public	Design and install more visible signage directing the public to the garden & Japanese plantings outside the garden	Enhanced visitor experience	Boost attendance	Not known, but not great	A huge number of vehicles drive by us without knowing who or what we are. We don't take advantage of how visible we are.	Cost.	Very high
Electrical panel, utilities, etc. screening	Install fencing or plantings to hide utilities like electrical panels and maintenance equipment like ladders	Enhanced visitor experience	Enhance aesthetics to attract more visitors.	Modest	Attention to detail is a significant part of what makes us different, plus it's culturally important.	Can't be slipshod. Needs to be well done, so not necessarily cheap.	Low
Light fixtures (13 around grounds, 4 more in roji)	Replace garden lighting with more suitable Japanese style fixtures or remove them entirely. Maybe relocate wire.	Path lights may be needed for safety (but probably not). Appropriate fixtures would be aesthetically	Appropriate lighting might enable nighttime (or late afternoon) use.	Parks Estimate \$3-5,000 -- obviously less if fixtures are just	Removal: Garden almost never open after sundown. Lighting not an important issue. Replacement:	May not be a very high priority.	Low
Manhole covers	Replace manhole covers which say 'sewer' and 'drain' with more attractive Japanese motif.	Enhanced visitor experience	Enhance aesthetics to attract more visitors.	Modest	Attention to detail is a significant part of what makes us different, plus it's culturally important.	What we have works. May not be a very high priority.	Low
West and north fences	Replace chain link fence with something more appropriate	Enhanced visitor experience	Enhance aesthetics to attract more visitors.	Unknown	Surely we can do better.	Cost.	Low

**PRIORITIES WITHIN AREAS**

Project	Description	Sustainability Benefits		Projected Cost	Comments		Sustainability Priority
		Physical	Financial		Pros	Cons	
<b>Operations</b>							
Publicity Marketing & Branding	In addition to web site, social media & brochures, active promotion with the tourist industry and community organizations	Any promotion of the garden will increase pressure to keep the garden looking its best	Increase public awareness, and thus attendance	Not known	Increased publicity, marketing and branding are a necessary component to achieving enhanced sustainability.	Cost	Very high
Entry Gatehouse functionality & operations	Assess and evaluate current uses of the Entry Gatehouse complex and determine how it might be improved	Determine and assure necessary maintenance	Important for future planning	Part of Optimal Management study	We need to assure we are using what we have to best advantage.	Difficult to measure	High
Increase ARC staff person to full time	Provide more planning and oversight for publicity, marketing and events	Challenge: nowhere on site to house such a person.	Increase existing and new fundraising events	\$ 18,000 per year	Necessary to expand the cultural outreach of the garden.	Cost	High
Coordination with entities looking for opportunities for visitors	Establish relationships with other entities such as tour companies, bus & cruise lines, concierges, etc.	Increase awareness and attendance	Increase public awareness and attendance	Will require part of some volunteer's or employee's time	Part of becoming a true community resource.	Will require personnel which will involve cost which may be significant.	Medium
Education	Classes, school tours, lectures, events, shows (bonsai, ikebana, haiku), tea, etc.	Needs to use existing facilities; may create pressure for new facilities.	Needs to be largely self sustaining.	Should be near neutral.	A significant part of the fulfillment of the cultural side of our mission.	With limited facilities, will require a certain amount of prioritization and may make some activities seem less important than others.	Medium
Partnerships with other community organizations	Establish relationships with other community orgs such as UW, Arboretum Foundation, Wing Luke, SAAM	All these partners could potentially provide skills, enhancements, programs, etc. that would enhance the garden.	Increase public awareness and attendance	Will require part of some volunteer's or employee's time	Part of becoming a true community resource.	Will require personnel which will involve cost which may be significant.	Medium
Special events (weddings, other celebrations and observances)	Weddings or at least wedding photos, more teas, Japanese cultural classes, exhibitions , concerts & events	Appropriate cultural events should enhance visitor experience	At least some of these need to generate revenue. Playing a significant role with regard to Japanese culture will increase attendance generally.	Should generate revenue	This is how the garden becomes both the cultural and the horticultural leader of things Japanese.	Weddings and similar events can be very hard on a garden.	Medium
Winter Open Hours	Increase accessibility to the garden throughout the year	The winter experience will attract new supporters and support to maintain and enhance the garden.	Increase visitor attendance	Needs to cover cashier, etc. costs	To see the garden in the winter is a unique and special experience.	Must work with and around maintenance needs and projects.	Medium



**PRIORITIES WITHIN AREAS**

Project	Description	Sustainability Benefits		Projected Cost	Comments		Sustainability Priority
		Physical	Financial		Pros	Cons	
<b><u>Future Projects</u></b>							
							<b>Prioritize</b>
							<b>High, Medium, Low</b>
Bonsai garden	Investigate and negotiate a plan to house the Weyerhaeuser Pacific Rim Bonsai Collection adjacent to the existing garden	Would be outside the current garden perimeter.	Would increase attendance. Might also allow us to increase admission price.	Unknown	An opportunity to expand the mission of the JG in a significant way	Represents a major undertaking that would absorb a great deal of time, money and effort, perhaps to the detriment of core functions of the existing garden.	High
Display garden outside TCR	Revisit the Display Garden funded by the Seattle Garden Club.	Realize this area's potential as a demonstration garden.	Provide a major donor their money's worth.	Unknown	This is really an unfinished or not well enough finished part of the Entry Gatehouse project.	Will involve additional gardener time and potentially some design cost.	High
Gift shop	Research optimal models and implement a garden related gift shop inside or near the garden	Location uncertain.	Should produce at least some revenue	Unknown	Provides another common garden amenity. Might be operated by a concessionaire.	Gift shops tend to be high effort, low margin.	Medium
Oral History	Interview some number of dozen employees, volunteers and supporters of the garden	Clarify the history of the garden. Best assure that we identify physically important attributes of the garden.	Encourage the Japanese Garden family to support the garden in the future by demonstrating our interest in their contribution.	With volunteer labor, less than \$2,000.	An appropriate activity for any significant entity like the JG.	Takes time and effort to do an oral history properly.	High
Parking	Increase parking capacity near the garden	Would be outside the current garden perimeter.		Unknown	Any expansion in garden activities will increase the need for adequate parking.	Loss of park land. Addition of impervious surface. Cost.	High
Pavilion	Design & construct pavilion at north end of the garden as provided in the original Master Plan	Will eliminate some of that ugly chain link fence.	The incredible view from the north end will surely increase attendance.	Design Est. \$30-50 K Construction > \$100 K	The only unfinished part of the original JG master plan	Significant site issues. What can be built where? Would probably be a major undertaking.	Low
Restaurant	Research optimal models and implement a restaurant within or near the garden	Would be outside the current garden perimeter.	Should produce at least some revenue	Unknown	Could significantly increase patronage. Provides a common garden amenity.	Restaurants tend to be marginally profitable.	Low
Volunteers' work area	Create or enlarge an area where volunteers can train, meet, and work	Would probably be outside the current garden perimeter.	More activities will almost certainly involve more volunteers.	Unknown	If the garden is to expand its offerings, it must provide for the care of ever more volunteers.	Would have to be outside the present garden area. Cost.	Medium

Project	Description	Sustainability Benefits		Projected Cost	Comments		Sustainability Priority
		Physical	Financial		Pros	Cons	

**ASSOCIATED GROUPS OF PROJECTS**

**1.**

<b><u>PONDS</u></b>							
Pond bank	Repair erosion damage, particularly to Turtle Island and the island between the two bridges						Very high
Pond circulation pumps	Improve water quality (i.e. pH and oxygen) via improvements in filtration and aeration						Medium
Pond sediment	Remove sediment from the pond to restore depth needed by the koi.						Medium

**2.**

<b><u>HARBOR STEPS</u></b>							
Harbor stone steps	Raise west path where puddles form, mark steps for safety.						High
Harbor stone stairs	Repair/rebuild middle steps to upper path						Low

**3.**

<b><u>ADDITIONAL HIRES</u></b>							
Hire seasonal staff and/or interns	Provide more and better garden maintenance						Medium
Hire specialty staff (e.g. Masa)	Skilled Japanese gardeners for pruning, candling, new plantings and removal of existing plants & other specialized tasks						High
Increase ARC staff person to full time	Provide more planning and oversight for publicity, marketing and events						High

Project	Description	Sustainability Benefits		Projected Cost	Comments		Sustainability Priority
		Physical	Financial		Pros	Cons	
<b>ASSOCIATED GROUPS OF PROJECTS (continued)</b>							
4.							
<b>VISIBILITY</b>							
Publicity Marketing & Branding	In addition to web site, social media & brochures, active promotion with the tourist industry and community organizations						Very high
Signage & Entry Gatehouse appearance & visual message to public	Design and install more visible signage directing the public to the garden & Japanese plantings outside the garden						Very high
Entry Gatehouse functionality & operations	Assess and evaluate current uses of the Entry Gatehouse complex and determine how it might be improved						High
5.							
<b>TEAHOUSE, MACHIAI AND ROJI</b>							
Machiai roof	Replace deteriorated wood roof both because a new roof is needed and to protect structure from water damage.						High
Tea House structure	Maintenance and prevention of deterioration from mold and mildew during cold wet months						High
Machiai structure	Preservation of the waiting station in the outer garden of the tea garden.						Medium
Roji maintenance	Increase maintenance of roji grounds, perimeters and gates						Medium

Seattle Japanese Garden – Seattle Parks and Recreation

**2012-2015 Project List for Seattle Japanese Garden**

Project	Detail	Priority Rank	Recommendation
<b><u>Front gate security issues</u></b>	Redesign and modify current gate (both main gate and side gate) to prevent People from climbing over the gate to enter the garden when we are closed. <b><u>Artist of Record must be consulted</u></b>	<b>1</b>	Redesign the gate and increase height <b>Design fee estimate: \$7-8K</b> <b>Construction: in-house or \$12-15K</b> 2012 project
<b><u>Replace garden lamp posts and lighting system</u></b>	With more appropriate lighting coverage; and meet classical Japanese Garden lamp style (current one is very western Park lighting).	<b>1</b>	Parks will work on this through collaboration between shops and NRU. but we might need to invite Japanese Garden design consultant to design <b>Design fee estimate: \$3-5K</b> 2012 project
<b>Pond filter system and aeration improvements</b>	With a volunteer named Ron Rodgers who worked in this professional field link with JGAC, we will obtain resolution options and cost estimate.	<b>2</b>	Survey, and research has been carried on by NRU, Shops, David B. and Ron Rodgers <b>Construction cost estimate: \$200-220K</b> 2012-13 project
<b>Pond sediment removal and cleanup</b>	This is periodical work. Last done in 2003 and it is time again to do this.	<b>2</b>	<b>Construction cost estimate: \$75-100K</b> 2012-13 projects. It should associate with previous project.
<b>Replace roof and partial structure of Machiai (shelter) at Roji Garden</b>	Strongly recommended by Kyoto classical Tea House architect, we need to replace deteriorated wood roof. Worked with a Japanese Garden carpenter to assess the structure condition and give a cost estimate.	<b>1-2</b>	Construction cost estimate: 15-20K 2012 or 2013 summer project
<b>Repair/replace broken sandstone steps and pavers in the Harbor Area at North end of Japanese Garden</b>	Potential Safety issue. Old sandstone steps and pavers need either reposition or replacement. Assessment and research needs to be done in 2012.	<b>3</b>	<b>Construction estimate: \$75K</b> 2014 project
<b>Pond embankment reformation</b>	Embankment pond shoreline and small island edge improvements	<b>4-5</b>	Large investment, but needs to done for long-term sustainability of the garden. <b>Big CIP estimate: &gt;\$200-250 K</b>
<b>Pavilion construction</b>	Old JG Plan proposed this pavilion, but need to define its functional use and reasonable size, location at the garden, and preliminary design.	<b>6</b>	<b>Design cost: \$30-50K</b> <b>Construction estimate: &gt;100K</b>



**Turnstone  
Construction Inc.**

September 26, 2012

Mr. Andy Sheffer  
Seattle Parks and Recreation

RE: Seattle Japanese Garden Proposal

Dear Andy,

Thank you for the opportunity to propose restoration measures for the koi pond at the Seattle Japanese Garden. After visiting the site and speaking with staff we have developed the following preliminary thoughts and proposal:

- **Pond and stream structures** : Develop a methodology for fortifying the perimeter banks and islands. This fortification shall not alter the existing aesthetic. The existing rock/boulder edging is to remain with new footing below water level. To promote stabilization of the pond and stream feature we will also examine the possibility of lining additional areas. This plan will also include draining the pond and outline necessary permits and optimum time of year to do so.
- **Mechanical system**: our observations of the incoming spring water from the slope to the south of the pond revealed a considerable flow. After hearing from staff some of the challenges that the existing mechanical system has presented we feel that efforts to sterilize and/or filter the pond water are best abandoned in favor of a simple system that effectively feeds the streams with the appropriate amount of water flow with energy efficient pumps and a minimum of valving. Additionally it is our feeling based on the information gathered that developing areas of increased oxygenation through aeration will enhance the health of the koi population and can perhaps be accomplished in such a way that the visitor experience is positively impacted by concentrating fish in areas where they will be best observed.
- **Stormwater collection**: Examine existing stormwater collection system from hillside. Determine if there are ways to better consolidate collection of stormwater. Test water quality of stormwater and propose measures for cleansing/filtering the water prior to entering garden. Examine possibility of developing a sump in part of the stream/pond system to collect sediment for easy removal.
- **Habitat enhancement**: Evaluate the existing fish and amphibian habitat and make recommendations for enhancement. The evaluation will include several analyses of the water at different points along the circulation system. The recommendations will correlate with the other recommended renovation measures.

**Deliverables:** Pond Restoration Feasibility Report to include recommendations on design and installation of specific measures to restore Koi Pond at the Japanese Garden. The report will include schematic layout plan showing pond and stream fortification, sections and details depicting specific measures, and a revised mechanical equipment layout in the mechanical space (identifying components to be removed and those items that will be added.) The report will include an appendix with product literature, design of the new oxygenation system, water testing results, a construction estimate with phasing and an optimum construction schedule.

**Price for the above:**

**\$6825 (excluding sales tax)**

Thank you for the opportunity to present this price. Please call if you have questions.

Sincerely,

John Fulford