City of Seattle
Edward B. Murray, Mayor

Finance and Administrative Services
Fred Podesta, Director

June 30, 2016

Councilmember Tim Burgess
Chair, Affordable Housing, Neighborhoods and Finance Committee
Seattle City Council

Re: Response to Statement of Legislative Intent (SLI)75-1-A-2 on Natural Capital

I am pleased to send this response to the City Council's SLI 75-1-A-2 on Natural Capital.

The City Council requested that FAS develop a scope of work for the valuation of Seattle's natural capital, and, further, to determine what would be necessary to include such an estimate in the City's asset management, cost-benefit analyses, accounting, reporting and planning, including how inclusion of natural capital can improve the City's bonding capacity. Finally, FAS was to propose how to incorporate the estimate in the surplus property disposition process.

Natural capital is an important concept that increasingly informs a number of decision-making opportunities in local government, including Seattle's Department of Parks and Recreation (Parks) and Seattle Public Utilities (SPU). This report was developed with the aid of the Office of Policy and Innovation and the City Budget Office and in consultation with staff from Parks and SPU. External stakeholders included the Seattle Green Spaces Coalition, the Trust for Public Land and the consulting firm Earth Economics.

Our work leads us to the conclusion that the greatest opportunities for incorporating natural capital may lie in the City's comprehensive planning framework and in capital project development similar to SPU's stormwater infrastructure program. If the City Council wishes to proceed, we recommend that the scope be narrowed to focus only on City-owned property. We further suggest that the council consider prioritizing its goals in using natural capital valuation and evaluate whether further analysis to explore the relationship among natural capital, social capital and environmental justice goals would be beneficial.

Sincerely,

for Fred Podesta

cc: Honorable Members of the Seattle City Council

Attachment: Response to Statement of Legislative Intent (SLI)75-1-A-2 on Natural Capital

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Natural Capital Valuation

Statement of Legislative Intent Response

SLI: 75-1-A-2

Requesting that FAS develop a scope of work for the valuation of Seattle's natural capital and how to incorporate that valuation into City reporting and planning.

The Council requests that the Department of Finance and Administrative Services:

1. Develop a scope of work for an RFP to estimate the value of Seattle's natural capital (open space, green space, tree canopy, etc.), both public and private;

2. Determine what would be necessary to include such an estimate in the City's asset management, cost-benefit analyses, accounting, reporting and planning, including how inclusion of natural capital can improve the City's bonding capacity; and

3. Propose how to incorporate the estimate in the surplus property disposition process.

Responsible Council Committee: Affordable Housing, Neighborhoods and Finance

Due date: June 30, 2016

Natural Capital

Statement of Legislative Intent Response

I. Background

A. Definition of natural capital and ecosystem services

Natural capital is defined by the International Institute for Sustainable Development as "the land, air, water, living organisms and all formations of the Earth's biosphere that provide us with ecosystem goods and services imperative for survival and well-being. Furthermore, it is the basis for all human economic activity."[1]

Ecosystem services are "the conditions and processes through which natural ecosystems, and the species that make them up, sustain and fulfill human life.[2] For example, air purification, carbon sequestration and rainwater retention are provided by forests. Many analyses use a list of 23 ecosystems services to assess natural capital (see Attachment A).

B. SLI problem statement

On September 28, 2015, Earth Economics made a presentation to the Seattle City Council regarding the various ways that natural capital valuation could be used by the City:

> *"Open space in the Central Puget Sound is a multi-billion dollar economic asset … This economy—and every resident and business—is inextricably linked with the natural landscapes. Our open space provides goods and services like clean water and air, food, flood protection, raw materials, energy, opportunities for play, and many more. This natural capital—the open space that provides these many benefits—is one of our greatest assets."*

Much economic decision-making at the City of Seattle is currently based on marginal costs and benefits, which may not take into consideration the value of underlying assets, especially natural assets. Ecosystems provide services essential to equity and resilience and future cost avoidance. Without a way to reliably and consistently measure the value of ecosystem services or natural capital, they are de facto discounted in analysis.

The City Council was interested in pursuing this approach and requested that the Department of Finance and Administrative Services (FAS) develop a scope of work to determine the valuation of Seattle's natural capital and how to incorporate that valuation into City reporting and planning. It should be noted that this Statement of Legislative Intent (SLI) was passed without appropriations; existing staff in FAS, the City Budget Office, the Office of Policy and Innovation, the Department of Parks and Recreation and Seattle Public Utilities have tried to address questions posed by this SLI as best their area of expertise allowed and have sought some (minimal) outside consultation.

While previous efforts to value natural capital have been somewhat contained in scope, the current SLI is requesting a scope for a much more comprehensive and broad-reaching analysis.

C. Process

FAS coordinated with OPI and CBO to prepare this SLI response.

- The Seattle Green Space Coalition (SGSC) met with FAS on March 4, 2016. SGSC provided suggestions on project design and shared recommended consultant qualifications to perform a study of natural capital.
- OPI, CBO, FAS and Parks staff met with internal and external stakeholders on March 14, 2016, to review materials from other presentations, and held follow-up conversations with a number of interdepartmental staff. (See Attachment H, Stakeholder Consultation List.)
- Staff researched case studies and academic literature to understand concepts and their application in the field. (See Attachment G, References.)

D. Examples in Seattle and other municipalities

Seattle and other jurisdictions have used natural capital valuation to achieve a range of policy objectives.

1. The Department of Parks and Recreation (Parks)
   In 2011, Parks contracted with the Trust for Public Lands to develop a report on the value of its land in Seattle. The report investigated the direct income to the City through increased property values and tourism spending, as well as direct savings by providing health benefits and recreational opportunities that would be very expensive to provide through the private market. The value of Seattle parks was also evaluated in terms of the environmental benefits of storm water retention, air quality and social cohesion. The conclusion of the report was that park space is worth approximately $500 million to the City.

2. Seattle Public Utilities (SPU)
   The Thornton Creek restoration project included the value of public benefits of salmon restoration and flood risk reduction, among others. Broadening the evaluation led to a more sustainable solution. Earth Economics prepared the analysis: http://www.seattletimes.com/seattle-news/thornton-creek-breathes-again-at-northgate/

3. Metropolitan Park District of Tacoma, Washington
   In 2011, Metro Parks Tacoma commissioned a study by Earth Economics to assess the value of parks in its jurisdiction. The study identified the acreage for 10 different types of land cover (e.g., beach, forest, urban greenspace). This provided a means to value many of the ecosystem services but not all, due to the absence of primary studies needed to provide a dollar value estimate. In summary, the study calculated a total annual value of $34 billion to $47 billion in ecosystem service benefits, improved health and education and social capital for Tacoma parks. It also proposed a range of opportunities to enhance decision-making, from improving the economic interface in environmental impact statements to including natural assets in cost-benefit analysis, to evaluating capital improvement projects, among others.

4. Santa Clara County, California
   In 2012, the Open Space Authority of Santa Clara County published a report titled "The Healthy Lands & Healthy Economics Initiative." The report is a comprehensive economic valuation of natural capital and ecosystem services in the Santa Clara Valley. Using inputs from 85 primary studies, the report estimates that the county's natural capital provides at least $1.6 billion to $3.9 billion annually in benefits to people and the local economy. The report estimated that the county's minimum natural capital asset value is between $45 billion and $107 billion, and perhaps as high as $386 billion if the renewable and/or long lifespan of natural assets is calculated with a zero discount rate. The report recommended allocating existing funding and future revenues to incentivize natural infrastructure solutions and developing sustainable funding sources and legislation to incentivize stewardship of natural capital assets on public and private lands.

5. Town of Gibsons, British Columbia
   The Town of Gibsons endorsed an eco-asset strategy in February 2013. The strategy recognizes that the town's natural capital assets, and the ecosystem services they provide, are a fundamental and integral part of the town's infrastructure. Specific examples of natural assets that provide direct municipal services include the Gibsons aquifer, providing water storage and filtration; creeks, ditches and wetlands, providing rain water management; and the foreshore area, providing a natural seawall. The town was able to include the following note in its financial statements:

   > *"The Town is fortunate to have many natural assets that reduce the need for man-made infrastructure that would otherwise be required. This includes the Gibsons aquifer (water storage and filtration), creeks, ditches and wetlands (rain water management) and the foreshore area (natural seawall). Canadian public sector accounting standards do not allow for the valuation and recording of such assets into the financial statements of the Town. As such, these natural assets are not reported in these financial statements. Nevertheless, the Town acknowledges the importance of these assets and the need to manage them in conjunction with man-made infrastructure."*

II. RFP development/ scope of work

A proposed table of contents for a full request for proposals (RFP) is provided in Attachment B. As requested by the City Council, a proposed scope of work is included below:

A. Scope of work

Estimate the value of Seattle's natural capital, both public and private, by the following methods:

1. Calculate dollar values for up to 23 ecosystem services provided by the City of Seattle's natural capital, to be selected by the City.

2. Provide ecosystem services values in a "per-unit" format that can be included in common economic tools such as business case assessments, benefit-cost analysis and environmental impact assessment.

B. Consultant qualifications

Attachment C includes some preliminary qualifications and experience of the prospective consultant to perform the natural capital valuation study.

III. Determine what would be necessary to include a natural capital estimate into City reporting and planning

Before an RFP has been issued and a qualified respondent selected, it is difficult to say what the results will be, what form they will take and thus how, exactly, they would be incorporated into City reporting and planning. However, to give a general idea of how the various valuation elements are currently tracked and what information goes into their analysis, below is a description of how the City tracks elements listed in the SLI:

A. Accounting

The City of Seattle adheres to rules set by the Governmental Accounting Standards Board (GASB), responsible for state and local government accounting standards in the United States. GASB rules, or generally accepted accounting principles (GAAP), focus on historical cost accounting and man-made assets. The City is required to comply with GASB guidance, and integrating values for natural capital into financial statements is inconsistent with GASB and GAAP. Without a change in GASB rules, accounting for natural capital value would have to be tracked separately from the rest of the City's accounting information in a satellite account[3]. A limited, stand-alone statement on the City's approach to natural capital and/or the valuation itself could potentially be added to the statistical section of the City's Comprehensive Annual Financial Report[4] or accompany City financial statements.

Annual accounting reports include a balance sheet (snapshot of assets and liabilities), as well as an income statement (revenues and expenditures). Setting up a new "natural capital" set of books would require the same kinds of accounting infrastructure as is required for purely financial transactions, including 1) ongoing maintenance of values/revaluation, 2) human infrastructure to maintain such books, and 3) IT infrastructure to record the information.

Assets typically depreciate over time, with the depreciation expenditure showing in the income statement and a reduced asset value on the balance sheet. However, natural capital is different because it cannot be easily liquidated for cash consideration, and it does not depreciate in the same manner as physical assets that the City tracks in the financial system.

Tracking natural capital as an asset would be relatively straightforward if natural capital was confined to City ownership. The proposal to include valuation of natural capital of privately held land creates a further complication. Without any property interest, private property is not properly an asset of the City. If considered important, the use of other non-accounting/financial reports would better serve the goal of incorporating a natural capital perspective (e.g., the City's Comprehensive Plan as discussed below).

B. Asset management

To a varying degree, the City tracks the tangible value of physical, financial and technological assets in its financial system, Summit. This information requires constant maintenance. For example, when City property is purchased or sold, staff updates Summit to add or remove a land asset. The acquisition cost becomes the book value, the sales price is captured, and any major renovations are also added to the asset database. Tracking natural capital as City assets would require the creation of an infrastructure to build and maintain an additional asset management system and the processes and people to maintain it. Moreover, tracking the value of private assets would expand the resource demand to maintain such a system.

C. Cost-benefit analysis

By quantifying natural capital values, the cost of some of the externalities that are not considered in a conventional tangible cost-benefit analysis could be figured into future analyses. Depending on the robustness and applicability of any one facet of natural capital valuation, incorporating these values into cost-benefit analyses enables government managers to be more informed about the full costs and benefits (present and future) when making decisions. Value guidelines could be provided through the RFP and used for estimates. Some natural capital benefits accrue to society at large and are in many cases not confined to the population of the City. That means that the people enjoying the benefits of a development project may be different than the people affected by a reduction in natural capital.

- Seattle Public Utilities incorporates a consideration of natural capital value and social value in its options analysis process for large capital projects, including green infrastructure. Once the technical alternatives are proposed, SPU economists use both quantifiable and qualitative variables across a set of potential project alternatives, e.g., the Thornton Creek daylighting project mentioned above. They rely on the many published studies since 1999 but have noted that gaps remain in the comprehensiveness of the data. SPU has participated in opportunities to improve quantification of ecosystem services.

D. Bonding capacity and bond rating

The City of Seattle has the authority to borrow money to finance its capital programs by issuing general obligation bonds backed by the full faith and credit of the City. The City's "capacity" to borrow money is primarily a function of its ability and willingness to dedicate future revenues to repay it with interest.

Under Washington state law, there are legal limits on the amount of general obligation debt that local jurisdictions, like the City of Seattle, may have outstanding at any given time. These limits are based on the total assessed value (AV) of all real estate within the City (currently $164 billion). However, these legal limits are not binding constraints for the City of Seattle, so "adding" the value of City-owned real estate to the amount that the King County Assessor determines as "total assessed value" would not increase the City's true capacity to issue debt. Furthermore, these legal limits were established by the state to prevent local governments from becoming over-leveraged and taking on debt that would exceed their ability to repay it over the long term. AV is one measure of a community's "wealth" and a proxy for its ability to absorb additional taxation necessary to repay debt. The state established these limits under the assumption that public real estate is not included in the computation. Adding public lands to the computation would not increase the community's ability to absorb additional taxation to

support more debt. It is therefore unlikely that the state would permit a large increase in "legal" capacity, just because the value of public lands was added to the AV computation. The City does not compute assessed values nor does it have authority to determine how the King County Assessor does so. This authority resides exclusively with the state.

Bond ratings are a third-party evaluation of an organization's ability to meet its financial commitments. The City already has an AAA Bond Rating, the highest available rating for a municipal government. Including a discussion of the value of natural capital in ratings discussions would not affect the City's bond rating. Bond rating agencies use assessed values as one of several proxies for the ability of the community to support the repayment of bonds (again, to absorb the additional taxation necessary to repay it). That underlying ability would not change by simply adding the value of publicly owned real estate to the assessor's computation. If this were done, rating agencies would likely subtract the value of the City-owned real estate in their analyses, so there would be no difference from a bond ratings perspective.

E. Reporting

The City produces a number of reports aside from financial reports, including programmatic reports, status updates, after-action reporting and project close-out reporting. For those reports that are not subject to state or federal scoping requirements, adding consideration of natural capital value estimates would be straightforward if the data was sufficient and relevant. Adding information to existing reports or adding new reports will increase reporting costs.

F. Planning

Seattle's Comprehensive Plan is the City's 20-year vision and roadmap for Seattle's future. This framework is an appropriate document to articulate the City's intent to value natural capital and to state how that value will affect future decisions about planning and investments. Detailed valuations could have a home in the Comprehensive Plan's appendix or in the functional plans of various capital departments. Because the City may amend the plan once each year, there will be ample opportunities in the future to add policies and data related to natural capital. The City's Comprehensive Plan could provide the basis for an integrated approach to identify project priorities. The Mayor's Recommended Plan, currently under review by the City Council, contains one particular policy focused on the urban forest that addresses the concept of natural capital:

- **EN 1.1** Seek to achieve an urban forest that contains a thriving and sustainable mix of tree species and ages, and that creates a contiguous and healthy ecosystem that is valued and cared for by the City and all Seattleites as an essential environmental, economic, and community asset.

The City's geographic information system (GIS) could be expanded to document and display natural capital information if resources were made available. For example, a new layer that classified all parcels in the City according to the land classes typically used in natural capital valuation would permit calculations of acreage that could be used to improve quantitative analyses for cost-benefit studies. The information would be static, and would become obsolete over time without a periodic refresh.

IV. How to incorporate natural capital valuation into surplus property review

A. Summary of "Procedures for the Evaluation of the Reuse and Disposal of the City's Real Property"

In 1998, under Resolution 29799, the City Council adopted procedures for the evaluation of reuse and disposition options. The resolution provides detailed policy guidance for the review process. In 2006, the City Council revised the procedures to expand opportunities for public input during the process, leaving the policy review guidance intact (Resolution 30862).

The stated intent of these policies and procedures is to strategically utilize real property in order to further City goals and to avoid holding properties without an adopted municipal purpose. Policy priorities identified in Resolution 29799 are applied to each property on a case-by-case basis, recognizing that many variables affect the suitability of a particular parcel for a specific use.

Procedural Steps

1. After a jurisdictional department declares a property excess[5] to its needs, (See definitions in Attachment D), the Department of Finance and Administrative Services (FAS) sends notice to City departments and public agencies that may be interested in the property or whose regulatory or policy responsibilities affect the property, followed by notification of nearby residents, property owners and identified interest groups. A minimum 30-day comment window is provided for initial feedback and for City departments to identify any interest in acquiring the property.

2. The jurisdictional department and FAS review feedback from departments, agencies and the public and conduct additional review of the guidelines set forth in Resolution 29799 (Attachment E). The jurisdictional department and FAS make a preliminary recommendation from these options:

    - Establishment of interim use until a future municipal use is implemented.
    - Transfer to another City department or to a non-City transferee (either specific or not yet identified) for implementation of a municipal use.
    - Designation as surplus property to be transferred to a non-City transferee (either specific or not yet identified).

3. To differentiate decisions that may require additional review before the City Council reviews legislation authorizing a decision, each preliminary property recommendation is classified as "simple" or "complex," based on variables such as conflicting proposals, community interest, required zoning changes and fair market value, among others. Further action follows one of two tracks – *simple* or *complex* -- with differing levels of additional public input, as outlined in the attached flow chart (Attachment F).

4. FAS publishes a "preliminary recommendation report" and sends copies to interested parties, including members of the public that submitted comments. The report is posted on the City website.

5. After a 30-day minimum review period, the jurisdictional department may send legislation for authorizing a proposed reuse or disposition option for simple excess properties to Mayor for transmittal to the City Council.

6. For complex excess properties, the report is published with a draft public involvement plan that outlines additional opportunities for public comment. The draft public involvement plan is provided to City Council or in a City Council committee meeting for input and informal approval. (No voting is required.) Typically, additional public involvement is comprised of one or more public meetings and may also include additional fliers or brochures, attending community group meetings and other activities as appropriate.

7. Following this second public input phase, FAS and/or other departments review information from the public and make necessary adjustments to the preliminary recommendation. The final recommendation report is circulated to the Real Estate Oversight Committee (REOC) for approval before legislation and the report are sent to the Executive for approval and then transmitted to City Council.

8. For both simple and complex property recommendations, public notice is required for the legislation transmittal, and a minimum of 30 days is required for public review on a final recommendation report prior to action by the City Council. A public hearing is required for complex properties and all utility properties.

B. Proposal for how to incorporate the estimated value of Seattle's natural capital into the surplus property disposition procedures

Applying the concept of natural capital to the real property disposition procedures is generally consistent with the guidelines of Resolution 29799, which provide an analytical framework for evaluating the decision to retain or dispose of individual City properties. Specifically, natural capital is related to several other concepts addressed in Guideline C of Resolution 29799 – Other factors, which lists variables including, but are not limited to:

- Highest and best use of the property.
- Unique attributes that make the property hard to replace.
- Known environmental factors that may affect the value of the property.

During the evaluation process for an excess property, information about the natural capital value of the property could be assembled. It could be possible to identify the extent of acreage that qualified as certain ecosystem types, e.g., tree canopy, passive open space, wetlands.

If the City proceeded to obtain consultant services in the area of environmental economics, it may be able to quantify the existing natural capital value of the excess property during the analysis phase. This could serve as a baseline for evaluating alternatives; however, unless a specific proposed project was identified, it could be difficult to even to obtain a rough order of magnitude (ROM) estimate of the net gain or loss to the natural capital value from that prospective change in use until land use applications are submitted. The SEPA process could potentially provide an opportunity for identification of evaluating

a project's impact on natural capital. In many excess property reviews, where the recommendation may be to sell a property competitively for fair market value and no specific project or use is proposed, there is no specific project designed for an excess property that is sufficiently developed to calculate a ROM.

For context, the typical excess property is less than 1 acre in size. Whether the estimate of value of Seattle's natural capital is calculated only for public property or for both public and private property, measuring a net change to the total value for Seattle's natural capital as a result of excess property development would be insignificant, given that the City owns more than 6,200 acres within the city limits and more than 132,000 acres in the state of Washington.

V. Recommendation

FAS recommends that the City Council identify its goals for use of information on the value of natural capital and whether existing strategies convey sufficient information (e.g., parks and tree cover goals in the Comprehensive Plan, characterization of property in the property disposition process). The City Council might consider whether an analysis that is as broad in scope as the one discussed above in the SLI would be valuable in making decisions. In addition, the City Council may want to consider further analysis to explore the relationship between natural capital and social capital. It's possible that the scope of the RFP could be modified or expanded to include consideration of environmental justice goals.

If the City Council would like to proceed with issuance of the RFP, further scoping work could be done to identify a focused subset of the 23 ecosystems services benefits that are most critical to support the City's existing sustainability goals, e.g., climate adaptation and climate justice, climate mitigation, water quality, and racial/social equity. FAS recommends that the scope of the RFP be narrowed to City-owned property. Further, if the goal for Council is to obtain natural capital valuations for excess property, it may be preferable to engage a consultant for specific sites rather than attempting to value natural capital across all City-owned parcels.

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[1] http://www.iisd.org/

[2] Daily, G.C. 1997. Introduction: What are ecosystem services? In G.C. Daily (Ed.), Natures services: Societal dependence on natural ecosystems, pp. 1-10. Washington D.C.: Island Press.

[3] Satellite accounts provide a framework linked to the central accounts and which enables attention to be focused on a certain field or aspect of economic and social life in the context of national accounts; common examples are satellite accounts for the environment, or tourism, or unpaid household work. (OECD Glossary of Statistical Terms, http://stats.oecd.org/glossary/detail.asp?ID=2385)

[4] Comprehensive Annual Finance Report (CAFR) is a set of U.S. government financial statements comprising the financial report of a state, municipal or other governmental entity that complies with the accounting requirements promulgated by the Governmental Accounting Standards Board (GASB).

[5] An excess property is property under the jurisdiction of a department that has not identified any current or future use for the mission of that department. A surplus property is property that has been deemed to have no further current or future use for the City and is authorized for disposition by either a negotiated sale or competitive process.

Attachment A

List of 23 Ecosystem Services

Services	Ecosystem Infrastructure and Processes	Goods and Services (examples)
Regulating Services	**Maintenance of essential ecological processes and life support systems**	
1. Gas regulation	Role of ecosystems in bio-geochemical cycles	Provides clean, breathable air, disease prevention and a habitable planet
2. Climate regulation	Influence of land cover and biological mediated processes on climate	Maintenance of a favorable climate promotes human health, crop productivity, recreation and other services
3. Disturbance prevention	Influence of ecosystem structure on environmental disturbances	Prevents and mitigates natural hazards and natural events, generally associated with storms and other severe weather
4. Water regulation	Role of land cover in regulating runoff and river discharge	Provides natural irrigation, drainage, channel flow regulation and navigable transportation
5. Water supply	Filtering, retention and storage of fresh water (e.g., in aquifers and snow pack)	Provision of water for consumptive use, includes both quality and quantity
6. Soil retention	Role of vegetation root matrix and soil biota in soil retention	Maintains arable land, prevents damage from erosion and promotes agricultural productivity
7. Soil formation	Weathering of rock, accumulation of organic matter	Promotes agricultural productivity and the integrity of natural ecosystems
8. Nutrient cycling	Role of biota in storage and recycling of nutrients	Promotes health and productive soils and gas, climate and water regulations
9. Waste treatment	Role of vegetation and biota in removal or breakdown of xenic nutrients and compounds	Pollution control/detoxification; filtering of dust particles through canopy services
10. Pollination	Role of biota in movement of floral gametes	Pollination of wild plant species and harvested crops
11. Biological control	Population control through trophic-dynamic relations	Provides pest and disease control, reduces crop damage
Habitat Services	**Providing habitat (suitable living space) for wild plant and animal species**	
12. Habitat and biodiversity	Suitable living space for wild plants and animals	Maintenance of biological and generic diversity (and the basis

		for most other functions)
13. Nursery	Suitable reproduction habitat	Maintenance of commercially harvested species
Provisioning services	**Provision of natural resources**	
14. Food	Conversion of solar energy into edible plants and animals	Hunting, gathering of fish, game, fruits, etc.; small scale subsistence farming and aquaculture
15. Raw materials	Conversion of solar energy into biomass for human construction and other uses	Building and manufacturing; fuel and energy; fodder and fertilizer
16. Genetic resources	Genetic material and evolution in wild plants and animals	Improve crop resistance to pathogens and pests
17. Medicinal resources	Variety in (bio)chemical substances in, and other medicinal uses of, natural biota	Drugs, pharmaceuticals, chemical models, tools, test and assay organisms
18. Ornamental resources	Variety of biota in natural ecosystems with (potential) ornamental use	Resources for fashion, handicraft, jewelry, pets, worship, decoration and souvenirs
Information Services	**Providing opportunities for cognitive development**	
19. Aesthetic information	Attractive landscape features	Enjoyment of scenery
20. Recreation	Variety in landscapes with (potential) recreation uses	Travel to natural ecosystems for eco-tourism, outdoor sports, etc.
21. Cultural and artistic information	Variety in natural features with cultural and artistic value	Use of nature as motive in books, film, painting, folklore, national symbols, architecture, advertising, etc.
22. Spiritual and historic information	Variety in natural features with spiritual and historic value	Use of nature for religious or historic purposes (i.e., heritage value of natural ecosystems and features)
23. Science and education	Variety in nature with scientific and educational value	Use of natural systems for school excursions, etc.; use of nature for scientific research

(Source: Earth Economics after De Groot et al. 2002)

Attachment B

Outline for a Request for Proposal (RFP) for Natural Capital Services

Section 1: Project Overview

Purpose and need
Scope of the project
Background
Study objectives
Deliverables
Timeline for completion

Section 2: Analysis

Approach
Methodology
Study's environmental and social equity outcomes
Stakeholder impacts and benefits
Cost and benefit analysis
Risks to the City
Political considerations

Section 3: Project Findings

Alternatives analysis
Types of valuation
Seattle's natural capital valuation

Section 4: Policy Evaluation

Public goods
Policy's environmental and social equity outcomes
Impacts and benefits
Impacts to the City's financial position
Investor demand
Review, debt, expenditures, and administration

Section 5: Policy Implementation

Integration of this policy with other City policies
Establishing City policy priorities

Section 6: Proposal

Contractor Schedule
Budget
Qualifications
Experience
Project List
References
Project Team
Evaluation criteria

Attachment C

Proposed Consultant Qualifications & Experience

(Source: Seattle Green Spaces Coalition)

1. Able to calculate dollar values for up to 23 ecosystem services provided by the City of Seattle's natural capital (green infrastructure).

2. Able to provide Ecosystem Service Values (ESV) in a format that can be included in common economic tools such as business case assessments, benefit-cost analysis (BCA) and environmental impact assessment (EIA), and support messaging for funding mechanisms such as bond issues.

3. Able to conduct Return on Investment (ROI) analyses of past green infrastructure investments, and discuss how green infrastructure supports equity in the City through improved amenities, disaster risk reduction, and other services.

4. In the area of Asset Management: consultant is able to
   a. develop a framework for incorporating green infrastructure into the City's traditional asset management systems,
   b. provide recommendations for how this asset management approach might inform city master planning and utility rate setting processes, and discuss how this approach might facilitate moving a greater proportion of green infrastructure investments into capital budgets.

5. Experience advising and working with various governmental agencies to incorporate ecosystem service values into benefit cost analysis, policy-making and implemented actions.

6. Experience advising and working with various governmental agencies, to incorporate ecosystem service values into benefit cost analysis and policy-making.

7. Strong bibliography of published work, used as reference material in the public and private sectors, and in academia

Attachment D

Definitions for Excess Property Procedures*

Disposal	The trade or sale of real property in which the City has a fee interest to a non-City entity.
Excess Property	Real property that the jurisdictional department has formally determined it no longer needs for the department's current or future use.
Jurisdiction	Primary responsibility and authority for real property as assigned by ordinance.
Jurisdictional Department	The City department or departments with responsibility for a specific parcel of real property as assigned by City Council.
Municipal Use	Active or passive use of real property to carry out general purposes of the City or to accomplish City goals and objectives.
Public Agency	A federal, state, or local (other than the City of Seattle) governmental entity, including, but not limited to, school districts; port districts; fire, sewer, and water districts; and public development authorities.
Real Estate Oversight Committee	A committee of City department heads (or their designees) appointed by the Mayor, chaired by the Deputy Mayor or other Mayoral designee that has the authority to review and make recommendations to departments or to the Executive on real property matters.
Real Property	Land and appurtenances to land, including buildings, structures, fixtures, fences, and improvements erected upon or affixed to the same.
Reuse	The use of an unused property or underutilized property, after review and assessment of the property's potential uses.
Sale	The conveyance to a non-City entity of all or a portion of a parcel of real property for consideration.
Trade	The exchange of one or more parcels of real property for other real property.
Transfer	The conveyance to a non-City entity of all or a portion of the rights associated with a parcel of real property.
Transfer of Jurisdiction	The internal process by which the City changes the department that has responsibility for a parcel of real property.

*A full list of definitions may be found in the "Procedures for the Reuse and Evaluation of the City's Real Property," revised in 2006 and adopted by City Council Resolution 30862.

Attachment E

Summary of guidelines for evaluation of reuse and disposition options per Resolution 29799

A. Consistency
Restrictions or limitations resulting from acquisition purposes or funding sources, title or deed restrictions, and city, state or federal ordinances, statues and regulations.

B. Compatibility and suitability
The Executive's recommendation for the reuse or disposal of the property should reflect its assessment of the potential for use of the property, not in order of priority:

- In support of adopted neighborhood plans.
- As or in support of low-income housing.
- In support of economic development.
- In support of affordable housing.
- For park or open space.
- In support of Sound Transit Link Light Rail station area development.
- As or in support of child care facilities.
- In support of other priorities reflected in adopted City policies.

C. Other factors
The Executive's recommendation should also consider, not in order of priority:

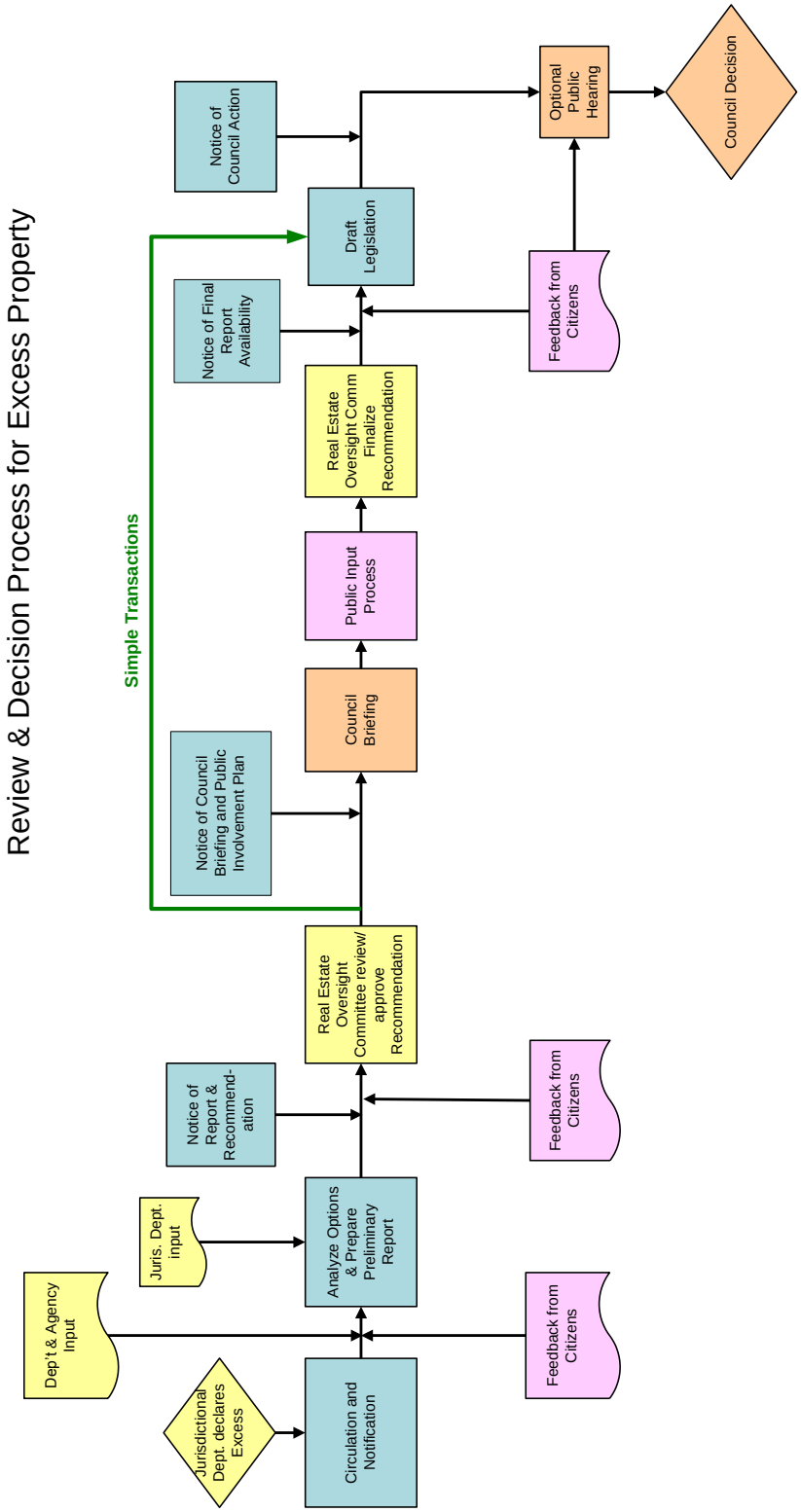
- Highest and best use of the property.
- Compatibility of the proposed uses with the physical characteristics of the property and with surrounding uses.
- Timing and term of the proposed use.
- Appropriateness of the consideration to be received.
- Unique attributes that make the property hard to replace (e.g., size, location).
- Potential for consolidation with adjacent public property to accomplish future goals and objectives of the City.
- Conditions in the real estate market from the perspective of a property seller.
- Known environmental factors that may affect the value of the property.

D. Sale
In making its recommendation for reuse or disposal, the Executive should also evaluate the potential for selling the property both to other non-City public entities and to members of the general public.

E. No ranking of the items in subsections B and C above is intended by their inclusion or order in the subsections. The requests of City departments and public agencies to obtain jurisdiction over or to acquire City property carry considerable weight but do not necessarily preclude a recommendation to transfer the property to a private entity for municipal use or to reclassify it as surplus.

Attachment F

Flow Chart for Excess Property Review Process



Attachment G

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Hawken, Paul. *Natural Capitalism – Creating the net industrial revolution.* Boston: Little Brown and Co., 1999.

Holzman, David C. "Accounting for Nature's Benefits: The Dollar Value of Ecosystem Services." *Environmental Health Perspectives* 120.4 (2012): a152-a157. Web.

Websites

Town of Gibsons, Canada. <http://www.gibsons.ca/sustainability>

Attachment H

Stakeholder Consultation

External Stakeholders

- Earth Economics
- Forterra
- Seattle Green Spaces Coalition
- Seattle Parks Foundation
- Trust for Public Lands

Internal Stakeholders

- Janice Marsters, Director, Citywide Accounting and Payroll Services, Finance and Administrative Services
- Michael Van Dyck, Investment/Debt Director, Finance and Administrative Services
- Susan Golub, Manager of Policy, Seattle Parks and Recreation
- Tom Hauger, Manager, Comprehensive and Regional Planning, Office of Planning and Community Development
- Pam Emerson, Green Infrastructure Advisor, Office of Sustainability and Environment and Seattle Public Utilities