

Review of College of Forest Resources Centers, Cooperatives and Programs
University of Washington Botanic Gardens
December 15, 2008

Executive Summary

- Sites that we steward provide a laboratory for restoration, conservation, and urban plant management.
- UWBG is the 3rd largest public outreach program at the UW. Links to the education community of all ages – preschool through high school – enriches lives. Our adult outreach interprets botanical science through formal and informal learning.
- We are the stewards of a historical legacy - Olmsted. The Washington Park Arboretum is the only designated Washington state arboretum.
- Students seek expertise in our graduate programs and after leaving the UW obtain significant professional positions.
- We join with other national public gardens in programs such as Center for Plant Conservation, Cultivated Flora of North America, Acer and Quercus inventory, and identify significant collections.
- UWBG preserves biodiversity through living plant collections, the Hyde Herbarium, Rare Plants & Conservation, conservation practices and the Miller Seed Vault
- Donor funds are being used according to donor wishes for the benefit of the community. An example is the Miller Library, a horticultural library established to serve the community.
- There are organizational challenges as we move with the College of Forest Resources to a new organization focused on the environment.
- There is a notable lack of key academic expertise available to the academic programs – horticulture, plant pathology, and entomology.
- There has been a lack of consistent University of Washington Botanic Gardens leadership over the past few years due to the difficulty of hiring and retaining a director.
- Historically, there has been competition for donors between various fundraising organizations that support the various units within the University of Washington Botanic Gardens.
- In the 1970's, state funds were cut from the units comprising the UW Botanic Gardens; the horticultural staff alone was reduced by 26 positions. The gardens and natural areas continue to struggle with invasive plant species and inadequate staff to maintain the gardens.
- In 2009 the University of Washington is preparing for a 20% reduction in state funds, some of which will probably fall to the UW Botanic Gardens. Already underfunded, the facilities and programs will be further eroded.
- The facilities where CFR faculty and UW Botanic Gardens staff are located are essentially full.
- Rebuilding/expanding SR520 will cut a swath through the center of the University of Washington Botanic Gardens, particularly the Washington Park Arboretum

Introduction

“The world is becoming increasingly urbanized....At the beginning of the 21st century, the University of Washington’s College of Forest Resources (CFR) is poised to take a leadership role in the area of forest and landscape management in this urbanizing environment. An integral part of this role is the Center for Urban Horticulture, along with its associated academic program...” (from the 2000 Professor Loveday Conquest (chair) report on the Center for Urban Horticulture, Affiliated Programs & Facilities – see appendices).

The following plan summarizes the University of Washington Botanic Gardens (UWBG) goals and vision for the next five years, as requested by Dean Bruce Bare of the College of Forest Resources on October 21, 2008. This report includes the UWBG vision for future research, financial resources, space and facility requirements, and human resources and leadership. Included are the following sections.

- I. Mission and Vision
- II. Strategic Plan
- III. Five Year Plan
 - A. Research
 - B. Outreach and Education
 - C. Governance and Financial Resources
 - D. Master Plans – Facilities and Space Requirements
 - E. Human Resources
- IV. Appendices

I. Mission and Vision

The University of Washington Botanic Gardens (UWBG) was established in 2005, combining the organizational responsibilities for the Washington Park Arboretum and the Center for Urban Horticulture/Union Bay Natural Area sites. The name UWBG was chosen to better reflect the education, research, curation and services offered by the united components, and the following mission and vision were established.

Mission

Sustaining managed to natural ecosystems and the human spirit through plant research, display, and education.

Vision

As an international hub for plant science, information, teaching and stewardship, we will promote an educated, inspired, and engaged society dedicated to sustainable ecosystem management.

II. Strategic Plan

The UWBG Strategic Plan was developed in 2006-2007 in alignment with the strategic plan of the College of Forest Resources.

Goals

The following are overarching goals for the organization.

Provide leadership in plant research, display, and education

- Conduct innovative research and promote applications of findings
- Provide high quality instruction and programs that are science-based and/or cultural and use the most appropriate method for informing the particular audience
- Provide and maintain high quality facilities and collections
- Use best practices for land stewardship

Strategies

The following strategies will allow the organization to reach those goals (see Appendix B for full listing of sub-points)

1. Achieve financial sustainability & growth
2. Broaden and diversify constituents; deepen involvement
3. Develop and implement an effective communications strategy
4. Develop and implement an effective marketing strategy
5. Foster excellence in people & resources

These goals and strategies are a close match to the recently developed three-year goals for CFR.

1. Increase morale and a sense of community
2. Improve CFR facilities
3. Increase funding for the College of Forest Resources (e.g., UWBG)
4. Create a positive public image, both on and off campus
5. Take a leadership role in making the College of the Environment successful
6. Increase the number, quality and diversity of students, faculty and staff in the college

After participation in the 2008 College of Forest Resources retreat, UWBG staff work plans have been refined to focus on implementation of these goals and strategies which include the resources required to achieve them, due dates, responsible parties and a system of metrics to measure progress toward achieving the goals. A demonstration work plan is included in the Appendices

III. Five Year Plans

A. Research

Current

Faculty from other departments, including Landscape Architecture and Biology, as well as faculty from throughout the College of Forest Resources, currently partner in research and teaching. Our associated faculty also integrate us with Washington State University and agencies such as the National Park Service and the National Oceanic and Atmospheric Administration. These partnerships expand the research at UWBG. By allowing other faculty within the new College to link to UWBG, we can collaborate on innovative research and we can expand the interpretation of research to the public.

There are many teaching and research collaborations already in place. While other units link with UWBG, several UWBG associated faculty have adjunct appointments in Biology and Landscape Architecture. We also teach students from UW Bothell and UW Tacoma through the Restoration Ecology Network. Students in a number of academic majors are partnered with community groups and city governments to undertake restoration projects. Students get intensive experience in restoration, working with faculty from all three campuses who have won awards in restoration.

In addition to the research on conservation and restoration performed at UWBG, there is also a strong history of research related to the urban environment. As the name “Center for Urban Horticulture” suggests, growing plants in urban areas has been an important part of our academic mission since our inception. Faculty and students have researched such topics as issues in urban forestry, how to prevent fertilizers and pesticides from entering local waters, and the presence of air and soil borne pollutants in urban vegetable gardens.

Future

The University of Washington Botanic Gardens has the potential to serve the new College of the Environment much as the Burke Museum serves the College of Arts and Sciences. Like the Burke Museum, UWBG has core faculty doing research and academic teaching on topics relating to the conservation and restoration of organisms and ecosystems. Like the Burke Museum, there is also significant expertise among the faculty and staff in interpreting this work for the public through displays, publications, and classes. Consequently, UWBG is respected through the region, country, and world for outreach as well as science.

The current faculty intends to continue building on the foundations of research they have already established. The restoration ecology faculty, Ewing, Bakker, and Fridley envision both basic and applied research that improves our understanding of how ecosystems function, especially as pertains to plant communities, and how to restore that function. Reichard will continue research on invasive plants, with her emphasis on understanding the pathways of how they are introduced and spread and the tools needed to prevent invasions. She will also continue rare plant research, including directing the UWBG conservation program, Rare Care. This work emphasizes understanding threats for species recovery. Kim will continue working on climate change and plant physiology, using the urban to wildland gradient to approximate climate change scenarios. In order for the program to grow, however, additional faculty will need to be added. Currently, the UW does not have faculty expertise in entomology, due to two retirements that were not replaced. Biology faculty has expressed an interest in this expertise and might support it within the UW. Many of our students work on aspects of plant/insect interactions such as predation and

pollination. In addition, forest protection is very important to the economy and environment of our state and, with our active ports, several harmful pest introductions have threatened those forests. We would also like to add additional faculty strength in urban horticulture, urban forestry, and plant pathology. This could increase our involvement with the Puget Sound Partnership, an agency of the State of Washington. Much of the pollution in the Sound comes from over fertilization and pesticide use, with poor storm water management. Having faculty expertise in this area will help us meet UW strategic goals on the environment and urban living.

B. Outreach and Education

Current

Arboretum – over 9000 participants in our programs per year, the majority being youth (>8000). Programs include:

- **Seedlings**, a new program introduced in 2006, for preschool audiences. This one-hour program has two themes, Trees and Seasons, and Wetland Wildlife.
- **Saplings**, for grades K-8. Teachers can choose from the following themes for this 90-minute program: Discover Plants, Life Cycle of a Plant, Native Plants and People, Wetland Ecology Walk.
- **Explorer Packs** and **Family Adventure Packs** are self-guided tours, using backpacks supplied with field guides, scavenger hunts, magnifying lenses and activity ideas for children in grades K-6.
- **Summer camps** include Arboretum Adventures, week-long day camps organized in partnership with UW Extension, and Summer Sleuths, 1 ½ hour summer programs for groups.
- **Adult tours** include the free weekend walks on 1st & 3rd Sundays, and scheduled tours, led by volunteer guides.
- **Other outreach** includes participation in events such as the Maple Festival at the Japanese Garden through providing educational activities for children at a booth.

Center for Urban Horticulture – over 1000 participants in programs for adult audiences per year. Programs include:

- **Conferences:** Organized on regular basis with partner organizations, for example stormwater management in 2007 in conjunction with Seattle Public Utilities.
- **ProHort programs** for professionals in the horticultural and tree care industries.
- **Adult programs**, for general audiences, with topics ranging from botanical art to gardening topics to walking tours of Union Bay Natural Area and other areas.
- **Tours** of the building and gardens, including Merrill Hall green building, library, herbarium, Union Bay Gardens, and Union Bay Natural Area.
- **Other outreach** includes presentations, booths (e.g. NW Flower & Garden Show), open house events, art exhibits in the library, volunteer work parties in UBNA, etc.

Other Programs with Significant Education and Outreach Components:

Elisabeth C. Miller Library– The library has over 17,000 visitors every year, including those attending tours and programs, such as the Family Story Time and customized presentations for UW and community college classes, plant and garden societies, library, art, and bibliophile organizations. Staff researched nearly 5,000 reference questions, including questions to the Plant Answer Line, a telephone, e-mail, and web-based reference service. Questions and answers are added to the searchable Gardening Answers Knowledgebase, available to all from the website.

Most of the library’s 15,000 books are available to check out by any Washington State resident with 15,000 borrowed each year. The library has extended hours on Monday evening year round and on Saturdays except in summer. Art exhibits with special openings attract more visitors and library remains open for all lectures presented by the Northwest Horticultural Society.

Rare Plant Care & Conservation (“Rare Care”) – 80 volunteers contribute 2,600 hours each year in monitoring, seed collecting, seed cleaning, outreach, and germination testing. Outreach includes annual Celebrating Wildflowers event, newsletters, & website.

Otis Douglas Hyde Herbarium – houses over 18,000 plant specimens and provides 300 plant identifications per year.

UW Restoration Ecology Network – The UW REN program is in its tenth year of partnering with community clients to complete restoration projects. The over fifty separate clients who have participated with UW REN have included schools, tribes, parks, preserves, private citizens, colleges, county governments, cities, homeowner’s associations, non-profit environmental organizations, environmental learning centers and others. With each project, students have enlisted the aid of community members, students from nearby schools and neighborhood businesses, bringing participatory environmental experience to an extensive network of citizens.

The Grounds Crew logs 2,500 hours of volunteer involvement on projects, with the largest single project being the Earth Day event, held in partnership with the Student Conservation Association. Service learning includes a partnership with Seattle Youth Garden Works for native planting and propagation projects. A new Adopt-a-Bed project in partnership with the Arboretum Foundation aims to increase volunteer participation in grounds maintenance.

Volunteer Involvement is a key component of our activities; we had over 12,000 volunteer hours annually.

Future

Strategic Plan–the UWBG Strategic Plan is nearly complete. In the draft Strategic Plan, the goal directly related to education & outreach is: **Broaden and diversify constituents; deepen involvement**, with the following strategies:

1. Create mechanisms for surveying our stakeholders to collect input and feedback
2. Provide innovative and high quality programs and services that include our stakeholders’ expressed needs and desires
3. Develop new, innovative collaborations with public and private organizations, local to international
4. Strengthen collaborative efforts with our existing partners

5. Increase public use of facilities and services

In the Outreach and Education Unit, for adults our emphasis will be in providing a variety of programs for a general audience with an emphasis on those topics that have demonstrated appeal (e.g. botanical art), tap into our research areas and staff expertise (e.g. pruning taught by staff members; tours of Union Bay Natural Area by Kern Ewing & grad students), and showcase sustainability issues (e.g. water conservation in the garden). We will also be exploring new partnerships, such as ethnobotany programs with the NW Indian College.

At the Arboretum, the emphasis will be on developing middle school and high school programs, developing the adult tours, and creating new innovative tours (e.g. “The Nature of Love”). New high school botany and middle school nature journaling curricula have been developed. We are exploring funding mechanisms to replenish our scholarship funds to provide more programming to low-income students. Organization-wide, strategies to reach new & diverse audiences include increasing the use of technology for outreach (e.g. redesign website, electronic newsletter, explore use of cell phone or podcasts for self-guided tours, developing a proposal for integrated information system), and integrating programs across units (e.g. explore offering building/garden tour to rental customers).

Two of the six major goals in the draft Strategic Plan call for **creating communications and marketing strategies** for the organization. Improved communication tools such as signage and brochures and better marketing of programs will assist with education and outreach goals.

Five year plans for the other units can be found in Appendix 4.

C. Governance and Financial Resources

Governance

The UWBG is the governing body for the plants collections at the Washington Park Arboretum, taking responsibility for the overall direction of its collections, interpretations, research use of the collections and educational and outreach programs. The Washington Park Arboretum land is owned by the City of Seattle and managed by Seattle Parks & Recreation Department. The Arboretum Foundation, established in 1935 to support and advocate for the WPA, serves on the WPA Master Plan Implementation Group, and is the major fundraising organization for the Arboretum.

A joint City Parks & Recreation/University/Arboretum Foundation advisory committee titled the Arboretum and Botanical Garden Advisory Committee (ABGC) was established in the 1970’s. Since WPA is designated as a State Arboretum, the Governor also appoints a member. The ABGC reviews plans and operations within the Arboretum and is responsible for WPA Master Plan implementation decision-making.

Recently, City Parks, CFR, UWBG, UW Advancement and the Arboretum Foundation formed a project group to improve working relationships around fundraising. A “donor centric” agreement was reached that will be implemented, starting in January 2009.

The Center for Urban Horticulture is the other major component of UWBG and is located on the 90 acres surrounding Union Bay to the north and includes the Union Bay Natural Area. Unlike the Arboretum, the University wholly owns this land.

The Executive Director, the chief operating officer, manages the whole of UWBG and all staff ultimately report to this position. All faculty have their appointments within CFR and do not report to the Executive Director. This was a change in administrative structure made in 1997. The core faculty now report directly to the Chair of the CFR Faculty, not to the Executive Director of UWBG. However, the faculty manage, advise, or engage with many of the programs and services conducted through UWBG, which could not succeed without their contributions. These relationships are critical to the success of UWBG. A shared reporting between CFR and UWBG would better facilitate these interactions. An appropriate UW model, already mentioned, is the Burke Museum. Core faculty there have an appointment in another department, but also work part of the year for the Museum. This model should be explored.

In 2008 the UWBG Advisory Committee was created including members from the professional community with expertise in particular areas that relate to activities and programs conducted by UWBG. These individuals also care about UWBG and support its mission and vision. They advise the Director and senior staff in areas of program development, evaluation, and possible funding.

Financial Resources

A report on UWBG's FY2007-08 financial status, showing a diverse annual income of approx. \$1.8 million, can be found in the appendices. This varies from year-to-year, depending on special project gifts and/or grants as well as revenue. (As noted in the footnotes of the report, faculty salaries and research grants are not included, nor is the salary of the Director or the half time Development Officer, both of which are funded by other campus organizations). State funding represents approx. 31% of UWBG's annual budget; endowment income represents approx. 11%; the Arboretum Foundation provides approx. 10% of annual funding, restricted to Arboretum operations; and self-sustaining units represent about 43%. General gifts and Center program-related grants play a minor part in the over all budget.

Also included in the appendices is a listing of the last 8 years of Arboretum Foundation's donations to WPA operations and a report from UW Advancement, totaling the donations to UWBG over the last 3 years. These show an ongoing but inconsistent giving record. Most of the funds received either from endowment income, gifts, grants, or educational programs revenue are restricted in their use. There are very few discretionary funds, making state funding UWBG's largest source of unrestricted, flexible funding.

UWBG's state funding provides support for the unit's core staffing including managers and plant collections stewards. Since 1983 UWBG has only received one state funding increase (beyond standard cost of living/merit allotments). In the late 1990's \$25,000 was provided by the Provost's Office to support the restoration of the Union Bay Natural Area (UBNA). However, UWBG State funding has taken a number of budget reductions over the years, with the last cut in Biennium '03-'05. At that time the Center for Urban Horticulture's and the Washington Park Arboretum's state budgets were both reduced by 10%. This cost each of these two units a staff position, leaving us even more understaffed in stewarding the lands for which we are responsible, and the \$25K for UBNA was reduced to \$20K. It also reduced funding for program-related RA's, and support for a number of other public-outreach programs.

Seattle Parks & Recreation has been an invaluable partner in caring for and improving the WPA. During the past decade a Parks Levy provided over \$2.5M to invest in infrastructure improvements, building the Japanese Garden Gateway, and establishing the first series of gardens to be built in WPA in 30 years—the Pacific Connections Garden. Because of the support of the City Council and the citizens of Seattle, another Parks Levy was passed in November 2008, which will provide another \$2.5M for Pacific Connections Garden Phase II infrastructure. In addition, the Arboretum Foundation was able to raise significant funds in support of these projects, with these funds going directly to Parks.

In the next five years, we expect to improve our funding in the following ways:

In an effort to increase donations and private support, a Fundraising Project Committee, made up of the partners at the WPA (City Parks, Arboretum Foundation, and the UW) was formed in 2008 and an agreement established to better manage the donor cultivation process and provide coordination and cooperation to fund the implementation of the WPA Master Plan. This also removes some of the barriers that limited our development officer in pursuing a broader range of opportunities to raise significant gifts and establish endowments. However, this will provide little support if any for activities and gardens at CUH.

In 2006, a UWBG Director's Guild was appointed to establish a development arm similar to the Arboretum Foundation but with the intention that the Guild would raise money to benefit primarily the CUH site and programs. This group has not yet been organized to facilitate fundraising events and donation opportunities of a significant nature, but with the completion of the fundraising agreement mentioned above, progress on developing this resource can now proceed.

Since we are not able to charge an entrance fee at either of the WPA or CUH sites, preliminary study has begun to explore establishing a membership program. This will likely be pursued over the next five years, providing UWBG with a broader group of individuals with varying degrees of interest and involvement in UWBG and its component parts. Membership in this group would be open to anyone who pays membership dues on an annual basis.

Even though the state and national economic situation is bleak, nevertheless, we feel that it is important to inform decision-makers of the importance of our education, research, and outreach. Strategies are being implemented in the following areas - capital requests to the state and federal governments; a request in the form of a bill to the state legislature to establish an endowment matched by donations for a curator; implementation of the recommendations of the Fundraising Project Committee to coordinate fundraising among support groups; continuation and enhancement of the Director's Guild; collaboration with other donor groups to enhance gift-giving; seeking grants; establishment of a corporate sponsorship program; increasing earned income from rentals and other revenue generating activities; and seeking UW investment in operations and donor celebrations.

D. Master Plans – Facilities and Space Requirements

Current

The University of Washington Botanic Gardens is composed of locations surrounding Union Bay – the collections at the Washington Park Arboretum and the Center for Urban Horticulture, which includes the Union Bay Natural Area. Within these locations are greenhouses, classrooms, a library, offices, laboratories, meeting rooms, and event facilities.

UWBG is a valuable University asset, totaling over \$100 million. The Washington Park Arboretum plant collections are valued at \$82 million. The building sites at the Center for Urban Horticulture are valued at \$17 million with the Union Bay Natural Area adding another \$3 million. These values were obtained at the time of building construction or at the time that Washington State Department of Transportation needed mitigation information for rebuilding SR520.

Washington Park Arboretum

We have completed a Master Plan for the Washington Park Arboretum. It has received the endorsement of the UW Regents and the Seattle City Council and implementation has begun, with a major new garden dedicated last fall.

Requests have also been made to build a curation building at that site. However, space is very limited in the buildings there now, with the University, city, and Arboretum Foundation staff competing for the limited space. One of the buildings is an old wood building (historic) and should be considered for replacement soon.

The Graham Visitor Center at the WPA is 5,000 SF with a meeting/classroom space, entrance lobby, gift shop, and offices for staff and the Arboretum Foundation. The building averages approximately 24,000 visitors a year. There is a 4,400 sq. ft. maintenance building, a 1,500 SF shed, and a ¼ acre yard which provides security for vehicles, equipment, and supplies. There are approximately 3,000 SF of greenhouse space for educational programs and for less-hardy plants.

Center for Urban Horticulture

In the early 1980s the community came together and donated \$17 million to build the Center for Urban Horticulture, with a shared vision of research and teaching about plants in cities and how gardening improves the urban environment. Twenty years later, following an arson, the community and the University of Washington again came together to rebuild the principle research and administration building. The new building was the first LEED certified building on the UW Seattle campus, reflecting the conservation and restoration emphasis of the academic program.

The new Merrill Hall has labs and office space and includes 2,500 SF of research laboratories and a 750 SF Continuing Education workroom. Also contained in Merrill Hall is the 3,500 SF Miller Library and the 1,200 SF Hyde Herbarium.

Other buildings include a 3,500 SF multipurpose conference hall for classes, lectures, events, and meeting space for horticultural groups and the Douglas Research Conservatory, with 5,000 SF of greenhouse space and 8,000 SF of support facilities.

The buildings at both sites total 35,600 SF, set on 230 acres of land at WPA and 90 acres at CUH. Together, these facilities and resources provide support for the research, teaching and outreach activities of UWBG.

Future

Washington Park Arboretum

Additional space is needed at WPA for education, curation, and maintenance staff. Depending on the final plan for SR520, there *may* be space available in the Museum of History and Industry building, assuming it relocates as planned. However, that will be some time away, at best, and may not occur. We need to continue planning to build, as specified in the Master Plan.

Center for Urban Horticulture

We are in the process of updating the existing Master Plan for the Center for Urban Horticulture site to complement the Master Plan for the WPA. Reflecting the more academic mission there, we expect to emphasize displays addressing current issues, such as biofuels, climate change, and stormwater management.

Merrill Hall is large enough to house the programs now there, but there is absolutely no room for growth. In addition, there is very little space for post-doctoral faculty and other visiting scholars, which are important for a vibrant academic program. The library and herbarium will also need expansion in a few years. Expansion of these facilities, as well as additional laboratory and office space, are included in the updated Master Plan.

E. Human Resources

Current Permanent Staffing Levels at UW Botanic Gardens

Below is a listing of current permanent staff at UWBG. It shows staffing levels for each unit and includes funding sources. (Figures do not include hourly staff, which supports a number of our units):

UWBG UNITS	NUMBER OF STAFF	FTE	<u>UWBG FUNDING SOURCES BY FTE</u>		
			State	Gifts/Grants/ Revenue	Endowment Inc.
Faculty (4)	4	3.0			
Admin (1) (2)	4	3.4	2.8		0.2
CUH Grounds (incl. UBNA Staff)	4	2.5	1.86	0.57	0.07
WPA Grounds	6	6.0	4.0	2.0	
Miller Library	4	3.5	0.4	~1.5	~1.6
Herbarium (Grad Stdnt RA'ship)	1	~0.42	~0.42		
Union Bay Natural Area (RA'ship)	1	0.25	0.25		
Rare Plant Care Program/Vault	2	1.6		1.6	
CUH/WPA Facilities/Rentals	6	4.25		4.25	
Adult Education	2	2.0	1.45	0.55	
Children's Education	2	1.75		1.75	
Curation	2	1.5	1.0		0.5
Development (3)	1	0.5			
TOTALS	39	30.67	12.18	+ 12.22	+ 2.37=26.77

Notes:

- (1) Administration includes the Interim Director (@ 40%), the Manager of Facilities & Grounds, the Manager of Administrative Services, and a Fiscal Specialist.
- (2) The Director is not paid from UWBG funds.
- (3) The Development Officer is not paid from UWBG funds.
- (4) The faculty are on 9-month appointments (75%) and are not paid from UWBG funds.

Future Permanent Staffing Needed at UW Botanic Gardens in Addition to Current Staff:

In addition to the existing positions, in order to meet national standards for botanic gardens, to move ahead with the implementation of WPA and CUH Master Plans, and to begin to model UWBG after the Burke Museum, the following positions will be needed. Below is a summary of those future staffing needs.

Faculty: Two to three new faculty are needed to round out the complement of the disciplines needed. They include: an Entomologist, a Plant Pathologist, and a Horticulturalist.

Administrative/Management Staff:

Full-Time Executive Director: The Director's position has been a full-time position since the inception of CUH in the mid 1980's. Currently, due in part to challenges in hiring a new permanent director, a retired UW employee, who is restricted to 40% time, is temporarily filling this position. Given the demands on this position it requires full time status.

Curator: UWBG collections have been without a curator since 1993. This has left a significant hole in the staffing of this world-class botanic garden and arboretum. This position would focus on the preservation, maintenance, and presentation of the botanic garden's collections and the goals established for the Washington Park Arboretum as the only officially designated state arboretum. A state legislative bill was drafted in 2008 and re-introduced in 2009 that would provide matching funds to support an endowment to fund this position.

Fiscal/Administrative Staff: As the budgets and number of staff increase, more fiscal, personnel, and payroll staff will be needed. Based on a model of 0.5 FTE per \$500K of resources and 15 permanent staff, 1-1.5 additional administrative staff will be needed.

CUH/UBNA Grounds & Horticulture Staff: In order to meet national standards for botanic gardens, CUH will need 8.5 additional grounds and horticulture staff to adequately manage the gardens, greenhouses and nursery, and the UBNA.

Miller Library Staff: To more adequately meet the needs of the library users, which span from professionals, students, enthusiasts, and the general public throughout the area, region, nation, and internationally, the Miller Library will need a professional curator to replace the one lost in a recent budget shortfall; a professional librarian to fully staff the Plant Answer Line; and two half time paraprofessionals, one for serials manager and another for family and children's programs.

Hyde Herbarium Staff: The Hyde Herbarium needs to bring its manager position (currently a half-time student position) up to full time and add an additional half-time manager for the Cultivated Flora of N. America project, for which UWBG is the Pacific Northwest lead.

Union Bay Natural Area Staff: Due to previous budget cuts, the UBNA student assistant was cut from half time year round to half time two quarters per year. The program has suffered from this. UWBG would like to restore this position to its previous level.

Rare Plant Care & Conservation Program Staff: The Rare Care program received gift funding to build a seed vault, which needs a full-time manager.

Facilities/Rental Program Staff: This is a self-sustaining program and as it grows, it will require additional staffing. Estimates suggest that one additional full time staff person will be needed.

Adult and Children's Education Outreach Programs Staff: Additional needed staff include a full-time registrar to handle the over 6,000 students that come through UWBG each year; a full-time communications manager; a full-time webmaster; two additional education program assistants; and a volunteer coordinator to recruit, manage, and track UWBG's growing volunteer force that currently numbers approx. 225.

WPA Grounds & Horticulture Staff: In order to maintain the current and future gardens and plant collections the UW owns and manages in WPA, 16 additional gardeners and horticulture staff are needed to meet minimum national standards.

Plant Collection Curation Staff: To adequately maintain records on the nationally renowned collections owned and managed by the UW at WPA, one full-time curator is needed to meet minimum national standards.

Development Staff: Given that much of these additional staff are not likely to be funded through state funding, development (fundraising and donor stewardship) becomes critical in meeting these needs. UWBG estimates it needs 2-4 additional development staff to seek private and foundation support for the staffing and program needs of UWBG.

IV. Appendices

1. Aerial Photo UWBG
2. UWBG Fact Sheet
3. UWBG Strategic Plan
4. Five Year Plans for Units within UWBG
5. Sample Unit Work Plan – Miller Library
6. Bill Request for Curator at WPA
7. UWBG Collections Policy
8. UWBG Conservation Policy
9. Management Chart for UWBG
10. WPA Master Plan: Circulation & Facilities Plan; Illustrative Plan
11. UW Botanic Gardens Master Plan Update – CUH Site
12. Union Bay Natural Area: Executive Summary, Trail Map: Walks & Tours
13. Operation Budget for UWBG FY07/08
14. Omitted
15. UWBG Private Support Report
16. Recent Granting Funding History of the Arboretum Foundation to UW WPA Program
17. Faculty associated with UWBG, Abbreviated CV's; J. Bakker; K. Ewing, S. Kim, S. Reichard
18. Graduate Students – Accomplishments
19. Current and Recent Academic Collaborators of UWBG Core Faculty
20. Partnerships – organizations that UWBG works with collaboratively on an on-going basis
21. Report on the Center for Urban Horticulture, Affiliated Programs & Facilities by Professor Loveday Conquest, et al, 2/16/2000

Footnote: Abbreviations

ABGC	Arboretum and Botanical Garden Committee
AF	Arboretum Foundation
CFR	College of Forest Resources
CUH	Center of Urban Horticulture
CV	Curriculum Vitae/Description of Academic Activities
Parks	Seattle Parks & Recreation
RCEP	Review of College Education and Programs
UBNA	Union Bay Natural Area
UW	University of Washington
UWBG	University of Washington Botanic Gardens