



*A community greenhouse and garden
growing a healthier and greener Carson City.*

The Greenhouse Project

Business Plan

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Executive Summary

The Greenhouse Project is a Nevada non-profit corporation whose mission is to establish and sustainably operate a community-based greenhouse and garden in Carson City. The project operates under the auspices of the Carson City Cultural Commission and its Special Citizen Action Group and Board of Directors, and is a nonprofit program and a 501(c)(3) tax-exempt organization.

The Greenhouse Project provides educational and vocational opportunities for students, youth groups and special needs individuals in a garden setting and serves as a year-round source of locally-grown agricultural and horticultural products for the Carson City community. The greenhouse operations rely on renewable energy sources for power and use ecologically sustainable growing methods to cultivate vegetables, flowers, and bedding plants.

The greenhouse serves as a teaching facility for hands-on training programs that emphasize environmental stewardship, civic engagement and academic achievement. Through these programs, students cultivate and distribute vegetables for school culinary classes and local food banks and produce flower baskets for the downtown Carson City corridor as well as forward a sustainability model to insure the future funding of The Greenhouse Project Program.

In addition to providing youth educational and vocational opportunities, The Greenhouse Project also serves the needs of Carson's low-income community by increasing access to fresher, more nutritious food supplies. The project also promotes revitalization of Carson City's downtown commercial corridor by enhancing its appearance through horticultural arts.

The Greenhouse Project supports these programs through a community supported agriculture program, local business sponsorships of the flower baskets, and annual fundraising events that include a benefit concert, silent auction, and a celebrity-chef dinner, plant sales, and instructional workshops. The potential for additional revenue from edible mushroom sales and contract growing of vegetable start plants is being considered. Grants from a variety of government and private sources also fund The Greenhouse Project.

The greenhouse and garden is located on a one-acre site on the Carson High School campus. The construction of the 2,160 square-foot greenhouse, which is powered with a ground source heat pump and solar power was completed in December 2011. More than 40 outdoor raised planting beds, a small orchard, and a hoop house and lath house provide additional growing space. Two restrooms and a nascent trail system complete the site.

Local professionals donated the legal, accounting, engineering, construction management, and real estate services needed to incorporate as a nonprofit entity, request 501(c)(3) status, evaluate sites, negotiate a lease with the Carson School District, apply for special use and building permits, compile grant applications and construct the facility. Agriculture and government professionals in the Carson community have also contributed their expertise in creating a viable

business plan for the project's operations. Similar in-kind contributions are pledged for the development of the alternative energy systems, educational programs, and on-site recreational activities.

The Greenhouse Project grows and distributes thousands of pounds of produce annually. With local food banks and low-income individuals receiving 90 percent of the production, the project provides nutritious, locally grown vegetables to approximately 3,000 people a month. The remaining produce is donated to the Carson High culinary program to ensure that the culinary students have a steady source of seasonal vegetables year-round and is also featured on the menu of the annual harvest dinner, a benefit function for The Greenhouse Project.

And, at least 200 students are expected to participate in The Greenhouse Project's educational and vocational programs each year. The grade schools, middle schools and high school as well as Western Nevada College are involved, as are youth enrolled in after school programs. Community outreach programs continue to extend the educational opportunities to interested adults, involving them in activities such as master gardener classes.

Finally, the Greenhouse Special Citizen Action Group organizes the production and care of more than 60 hanging flower baskets yearly since 2009 and has consistently through an annual sponsorship campaign provided that number of baskets to the present and anticipates increased production in the years to come. The Greenhouse Project assumes responsibility for these flower baskets, continuing this vital contribution to the revitalization of Carson City's downtown corridor each summer. The Greenhouse Project will also pursue, implement and maintain an ongoing sustainability model to insure the future funding of its programs.

The Organization

The Greenhouse Project is a nonprofit Nevada corporation and a 501(c)(3) tax-exempt organization. A Special Citizen Action Group supports the project as a broad-based advisory council as does The Greenhouse Project Board of Directors.

The corporation's Board of Directors and the Citizen Action Group are professionals in the fields of horticulture, agriculture, law, arts, marketing, accounting, construction, youth and business development, grants administration, and parks and recreation. Action Group members also represent the Carson City School Board, School District, Cultural Commission, and Planning and Business Development Departments, as well as local nurseries, organic farmers, University of Nevada Cooperative Extension, local professionals, downtown businesses and the Downtown Carson City Farmer's Market.

Project History

The Greenhouse Project concept started in November 2008 with the Carson City Cultural Commission, an advisory board to the Carson City Board of Supervisors, whose mission is to forward civic and economic benefit for Carson City and the State of Nevada. Cultural Commission member Karen Abowd proposed that the Commission undertake a project to increase agricultural and horticultural arts in Carson City. To this end, a Special Citizen Action Group of over 35 members was formed and, in February of 2009, the group presented the project to the Board of Supervisors. The project won the Board's approval together with its commitment of staff resources to aid in establishing a community greenhouse.

Karen Abowd's original concept was to build a greenhouse to produce hanging flower baskets for Carson City's downtown business district and feed the in-need of the community. The Action Group envisioned the greenhouse as a community facility that would serve an even broader purpose by providing a hub for people of all ages to engage in cooperative, healthy activity. Thus, the project was expanded to include the production of flower baskets, plus educational and vocational programs that ultimately serve as a source of fresh produce for local food banks and school programs.

Initially, the organization's primary focus was on locating a suitable site for the greenhouse. A total of seven sites were reviewed, with Carson High School offering the best overall location.

Three members of the Action Group – Karen Abowd, Kathy Halbardier and Jennifer Pruitt – explored site options based on criteria such as the site's proximity to schools and public transportation, site improvement and utility hook-up costs, suitability for solar panel arrays and wind turbines, security, visibility, expansion potential, and neighborhood and city support. The group examined properties offered by Carson Tahoe Hospital (CTH), Boys and Girls Club, Eagle Valley Middle School and two private landowners.

Of these initial sites, Eagle Valley Middle School was recommended as the most promising. At a town hall meeting in July of 2009, the School District presented its plan to develop the school's grounds and included the greenhouse as a component of the overall project. The neighboring residents, however, strongly objected to a bus barn proposed for the site and, as a result, the school district delayed the development plans indefinitely.

Following this set-back, the Colard Family generously offered Anderson Ranch property west of the Mountain Street Trailhead, and included the greenhouse in its master plan. The proposed location of the greenhouse, however, was altered during Carson City's major plan review of the Anderson Ranch project in October 2009. The revised location was deemed unsuitable by all involved and the greenhouse was ultimately dropped from the project.

Shortly afterwards, Carson School District representatives requested that The Greenhouse Project Board consider property located on the Carson High campus as a location for the greenhouse. The offered location met virtually all site criteria and, in December of 2009, the Carson City School Board signed a Letter of Intent to lease a one-acre parcel to The Greenhouse Project.

The one-acre parcel initially offered was located within a 10-acre plot zoned as agricultural land. Upon further review, however, school district officials determined that a greenhouse in that location did not comport with the long-term plans for Carson High and thus offered an alternative site closer to school facilities. Several Greenhouse Board members inspected the alternative site with school district officials together with professional engineer Mark Rotter of Manhard Consulting and decided that it offered advantages over the initial site. Although the alternative site is not zoned for agricultural use, and therefore requires a special use permit for the greenhouse, significant cost savings would be realized due to its proximity to utility hookups and an existing access road. And, an existing fence already secured the site.

The process to secure a special use permit was started in early February of 2010. The Carson City Planning Department conducted a completeness review on February 23 and the special use permit application was submitted on February 26. The permit was approved at the March 31st hearing, and The Greenhouse Project negotiated the final terms of the lease with the School Board. By May of 2010 The Greenhouse Project had a permanent site.

Fundraising

The Greenhouse Project actively raised funds for construction of the greenhouse beginning in July of 2009. A generous \$10,000 donation in July prompted the incorporation of The Greenhouse Project as a Nevada nonprofit organization. The project raised the funds for the construction of the facility and for operations and expansion through grants, donations and the annual Concert Under the Stars, Celebrity Chef Dinner and Plant Sales.

The Ron Woods Family Resource Center is one of The Greenhouse Project's major partners. The partnership was formalized on August 31, 2009, when the two entities signed a Memorandum of Understanding in which the Ron Woods Center officially adopted The Greenhouse Project as a program under their federal tax identification number, thereby conferring 501(c)(3) tax-exempt status to the project's operations. The Greenhouse Project obtained its own 501(c)(3) tax-exempt status as of December 27, 2010 and has operated independently of the Ron Wood Family Resource Center since that time.

The Greenhouse Project continues to apply for grants and reach out to private donor opportunities.

Operations

Initial policies and procedures for the greenhouse operations were completed and job descriptions for projected staff were written. Collaboration with the Carson City School District and ongoing research into successful educational models continues. The Ag Department and Future Farmers of America were reinstated as the result of The Greenhouse Project at Carson High School. Enrollment began the first year with 20 students, expanded to 80 students in its second year and the 2013-2014 school year has seen the program grow to 160 students and has a waiting list.

The charitable and educational programs of The Greenhouse Project will be funded through a sustainability model to include a community-supported agriculture (CSA) program run by students and community volunteers, plant sales, flower basket sponsorships and educational workshops. As the program continues to grow other funding opportunities will be identified and TGP will pursue, implement and maintain those opportunities to insure the future funding of TGP program. TGP is exploring the economic benefits of edible mushrooms sales as well as contract growing of vegetable start plants.

The Greenhouse Project assumed responsibility for producing and maintaining the hanging flower baskets in December of 2010. This program, entering its fourth year, is supported by sponsorships from downtown Carson City businesses. The Carson City Parks and Recreation Department has agreed to hire laborers to water and maintain the baskets during the summer, with The Greenhouse Project providing the necessary funds. The greenhouse is used for growing the bedding plants and assembling the baskets. The flowers are then hardened-off in the hoop house prior to their installation along Carson City's downtown corridor in June.

Mission

The Greenhouse Project is a non-profit Nevada Corporation whose mission is to establish and sustainably operate a community-based greenhouse and gardens.

Vision

The Greenhouse Project provides educational and vocational opportunities for students, youth groups and special needs individuals in a garden setting and serves as a year-round source of locally-grown agricultural and horticultural products for the Carson City community. The greenhouse operations rely on renewable energy sources for power and use ecologically sustainable growing methods to cultivate vegetables and bedding plants.

Objectives

Accomplishments

- Selected greenhouse kit, purchased stamped, engineered plans for the greenhouse, and received pledge from Lopiccolo Construction to donate labor-----Accomplished
- Identified equipment and staffing necessary for the greenhouse operations and alternative energy sources-----Accomplished
- Secured letter of intent from the Carson City School Board for the lease of one-acre on the Carson High School campus----Accomplished
- Reviewed proposed site with a professional engineer, completed preliminary site plan, and submitted a special use permit application to Carson City for the greenhouse-----Accomplished
- Sponsoring and cultivating minimum 62 flower baskets per year for Carson City's downtown corridor and surrounding businesses.----Ongoing
- Established a web site and Facebook page and sponsored a contest to design a logo for The Greenhouse Project----Accomplished
- Held 2009, 2010, 2011, 2012, 2013 summer benefit concert and auction resulting in thousands of dollars in cash donations and multiple pledges for matching funds--Ongoing
- Annual Celebrity Chef Dinner and summer benefit Concert Under the Stars with a silent and live auction -----Ongoing
- Established nonprofit Nevada corporation and non-profit 501(c)(3) status----Accomplished
- Continue to apply for grants and solicit private donor opportunities----Ongoing

Short Term

- Secure the Carson High School site including finalizing a workable lease and site plan providing access, water and utilities using renewable energy sources---Accomplished
- Finalize the bid for the greenhouse structure through Growers Supply, construct and outfit the greenhouse to house this project---Accomplished
- Construct raised garden beds, a hoop house, lath house and small orchard to establish gardens and trails to complement the greenhouse---Accomplished
- Implement a staffing program using the High School teacher resources and supplementing with part time staff and volunteers including student and disabled workers--Ongoing
- Establish a CSA for cut flowers in order to support the greenhouse operations--Ongoing
- Secure sponsorship funding for 100% of the hanging baskets in the downtown core--Ongoing

Long Term

- Develop programs for the K-12 system, the Boys and Girls Club, and for the volunteer community such as entrepreneurial training, nutrition, physical fitness, mentoring with UNR and WNC students
- Access additional technical expertise from the WNC and UNR agricultural programs and AG producers.
- Develop, implement and maintain a sustainable model based on income generation supplemented by community support including donations, grants and volunteers to insure the future funding of TGP program.
- Develop or assist in the development of additional greenhouse and garden operations based on TGP model.

Management and Personnel

Development of this project is by a Citizens Action Group. The Action Group serves as an advisory council to The Greenhouse Project, a nonprofit Nevada corporation. The President of this corporation serves as the Project Manager. The Greenhouse is staffed by a full-time Greenhouse Manager and a part-time Assistant Manager. Both positions are paid.

Volunteers, students enrolled in education/vocational programs (internships), and youth involved in after-school programs provide additional labor for the greenhouse and gardens. Students pre-qualified as LMI (low to middle income) are eligible for paid, work study positions. Pre-qualified students are those qualifying for the free/reduced lunch program.

Partnerships:

- Ron Woods Family Resource Center
- NV Energy
- Carson City Board of Supervisors
- Carson City School Board
- Carson City Economic Development Department
- Western Nevada Supply
- Carson City Cultural Commission
- Carson City Licensing and Planning
- Carson City for Carson City Youth Development Grant
- Carson City and HUD, CDBG Community Development Block grant
- Nevada Small Business Development Center
- University of Nevada Cooperative Extension
- Nevada Agriculture in the Classroom (future)
- Specialty Crop Institute of Western Nevada College (future)
- AT&T
- Mae and Hop Adams Foundation
- Hamilton Solar
- Carson Tahoe Regional Medical Center
- Holland and Hart LLC

- Nevada Division of State Parks; Recreational Trails Program
- Noble Studios for building and maintaining the website
- Darrin Berger Architect donating plans
- Lopiccolo Construction donating construction management
- Manhard Consulting donating site engineering
- Laura Fitzsimmons and John Lambrose
- Betty Kophammer
- Abowd and Rose Financial Group
- And many others who are donating time and money....

Market Analysis

TGP targets three distinct market segments: downtown businesses, disadvantaged residents and consumers of Carson City with three distinct products – flower baskets, plants and produce. Nevada Department of Taxation 2004 report shows that there are currently 64 businesses in the downtown core and are included in the Carson City’s Redevelopment District. The demand for flower baskets is seasonal as dictated by the climate of Carson City.

The second segment of LMI (low to middle income) residents comprises 49% of Carson City’s population as of the 2000 census. The demand for produce is year round and increasing with the decline in the local and national economy.

As TGP continues to move forward creating, implementing and maintaining a sustainability model to insure the future funding of TGP program other market segments will and have been identified. A targeted produce CSA, edible mushroom production and contract growing of vegetable start plants have also been identified as potential income streams that do not impact the growing operations and space of the greenhouse for in-need food production and do accommodate an unmet demand in the region.

Competition

The business of the non-profit TGP is designed to supplement, and not compete with, the for-profit sector in the Carson City area.

Also, some supermarkets provide fresh produce to those in need, but demand outstrips the supply and supply is also limited to surplus on hand.

Farmer's Markets also offer an opportunity for the TGP to sell surplus produce and plants.

The Harvest Hub in Carson City will provide an additional outlet for the CSA and edible mushrooms.

Marketing Strategy

TGP aggressively recruits sponsors for the downtown hanging flower baskets. In order to identify and reach recipients of the produce, TGP partners with Friends in Service Helping, Food for Thought, the Ron Wood Family Resource Center and the Salvation Army.

The Greenhouse Project sales strategy are based on visibility, consistency, and strategic relationships.

- Visibility – TGP continually generates visibility in order to inform the community of the availability of basket sponsorships and free produce, the CSA cut flower program and any other fund-raising opportunity or community outreach program.
- Consistency – In addition to product consistency, TGP markets its products year round as seasonally appropriate.
- Strategic Relationships – Relationships are key to the development of a sustainable project as they allow TGP to position itself as integral to the success of downtown businesses and as a valuable contributor to the community's underserved populations. Forming mutually beneficial, strategic partnerships always will be a necessity to create an ongoing stream of financial support.

Operations of the Greenhouse Project

TGP grows and distributes hanging flower baskets for Carson City's downtown corridor. These baskets will include a mix of flowering plants. These baskets are designed for hanging from light poles during the summer months.

TGP grows and distributes vegetables year-round at no cost to residents of Carson City who are low-income, or otherwise disadvantaged. The vegetables include items like lettuce and other crops which are appropriate to the changing seasons.

The outside growing area at the greenhouse site allows for cultivation of cut flowers, herbs and additional produce. This same area may in the future be utilized for community access for in-need families to plant vegetables to supplement what TGP is already distributing to them.

Facility:

The Greenhouse Project (TGP) is a 2,160 s.f. facility located on the grounds of the Carson City High School. The facility is staffed by one full time Greenhouse Manager, one part time position and additional volunteers and work-study students. The greenhouse has the capacity to grow thousands of pounds of produce annually as well as bedding plants for the flower baskets. There are over 40 raised gardening beds, a hoop house, and trails on site.

Education:

The greenhouse serves as a teaching facility for hands-on training programs that emphasize environmental stewardship, civic engagement and academic achievement. Through these programs students cultivate and distribute vegetables for school culinary classes and local food banks and produce flower baskets used for the downtown Carson City corridor. The students also gain experience operating a CSA for cut flowers grown on the greenhouse site and may earn a stipend while doing so. One full-time certified agriculture teacher teaches at least one plant science class per year. Other disciplines are invited to incorporate the greenhouse programs into their teaching curricula.

Supply:

The Greenhouse Project serves the needs of Carson City's low-income population by increasing access to fresher, more nutritious food supplies. The project also promotes revitalization of Carson City's downtown commercial corridor by enhancing its appearance through horticultural arts.

Sustainability Summary

TGP on-going costs include maintaining the greenhouse itself, the construction of the greenhouse and all the necessary equipment and other essentials for growing, and site development work.

The greenhouse itself was the largest start-up expense. It included structure, interior workings, fencing, utilities, permits, liability insurance, ground source heat pump, solar pump, solar panel array, and monitoring systems.

The greenhouse needed the following equipment: a 30' x 72' greenhouse structure made out of polycarbonate, a ventilation system, a heater, a mister system, supplemental lighting, fertilizer injector, pruners, pots, trays, soil, seeds and assorted chemicals.

All parts of the project infrastructure are owned by TGP. Depreciation will be determined by the Carson City Comptroller in accordance with US and State of Nevada requirements.

Potential Funding Sources

- Nevada Works grants to fund wages for CSA student workers
- USDA grants
- Partnerships with AmeriCorps to provide student worker stipends
- Various additional grant funds to be applied for from related sources with an estimated value of \$2,000-\$200,000
- Flower Basket sponsorship program (raised \$14,000 in 2013 with 61 sponsors)
- Private donations--\$15,000 – \$25,000 annually
- Fundraisers such as the annual summer concert and silent auction--\$30,000 annually
- Plant sales and Educational Workshops--\$3,000 in 2013
- Edible mushroom sales and contract growing of vegetable start plants—\$ to be determined

Financials

Carson City Greenhouse Project Estimated One Year Operation Expenses

Revenues

Sales of Product	\$15,000.00	
Fundraising	\$60,000.00	
Individual/Business Contributions	\$65,000.00	
Grants	\$10,000.00	
In-Kind Contributions	\$10,000.00	
Other	\$5,000.00	
Total Revenues		\$165,000.00

Expenses

Salaries		
Facilities Manager	\$32,000.00	
Facilities Assistant/Laborers	\$8,000.00	
Payroll Taxes	\$4,000.00	
Payroll Benefits - Medical, Insurance	\$12,000.00	
Student Stipends	\$5,000.00	
		\$61,000.00
Operations		
Utilities & Security	\$7,200.00	
Insurance	\$5,500.00	
Repair & Maintenance	\$1,500.00	
Supplies & Plants	\$25,000.00	
Transportation	\$500.00	
		\$39,700.00
General & Administrative		
Advertising & Web Site	\$1,500.00	
Telephone & Cell Phone	\$1,200.00	
Office Expenses	\$2,500.00	
Taxes & Licenses	\$100.00	
Legal & Accounting	\$2,500.00	

Insurance	\$1,000.00
Other Expenses	\$6,000.00
	\$14,800.00

Total Expenses	\$115,500.00
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Excess Revenues over Expenses	\$49,500.00
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**Carson City Greenhouse Project
Sources & Uses Statement 2012**

Sources:

Grants	\$92,052.00
Other	\$98.00
Fund Raisers/Sales	\$88,589.00
Contributions	\$69,668.00
Total	\$250,507.00

Uses:

Personnel	\$45,509.00
Other Expenses	\$34,339.00
Staff Travel/Per Diem	\$50.00
Insurance	\$5,564.00
Operation Supplies	\$21,351.00
Occupancy	\$7,962.00
Equipment/Building	\$92,052.00
Reserves	\$43,680.00
Total	\$250,507.00

Greenhouse Manager Job Description:

- Record keeping for purposes of grant accountability and accounting
- Knowledge in greenhouse, fruit tree and vegetable production and management
- Capable of managing soil fertility and composting
- Capable of designing, installing and maintaining irrigation systems
- Reliable and accountable for monitoring heat and energy systems in a greenhouse environment
- Accountable for monitoring heating and cooling consistent temperatures for greenhouse
- Capable of scheduling volunteers and part time employees and coordinating with scheduled school classes
- Maintaining protocol for hygiene and cleanliness of greenhouse facility and surrounding grounds
- Capable of plant care and watering
- Finger printed and registered with Carson City Sheriff's Office to work with kids
- Non-smoking persons recommended for position as smoking presents a bacterial hazard to plant life
- 40 hours per week seasonally adjusted depended on crop and production needs
- Responsible for remote computer monitoring for temperature and humidity