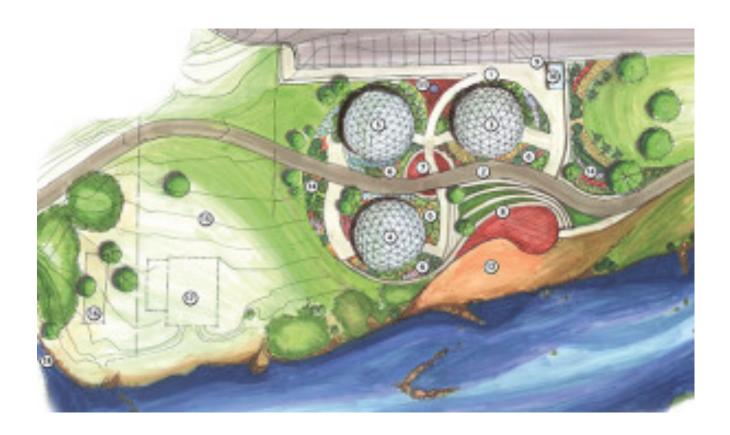


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## Business Plan – September 2014

# **Geothermal Greenhouse Partnership**



## **Executive Summary**

The Geothermal Greenhouse Partnership (GGP) is a 501(c)(3) not-for-profit organization with the mission of harnessing intrinsic renewable solar and geothermal energy to grow safe, sustainable, reliable and affordable food for local people, and provide a year-round attraction for visitors. In doing this, the GGP will beautify the River Walk in Pagosa Springs Centennial Park, create educational opportunities, nurture local businesses and create jobs, cultivate economic vitality, revitalize downtown Pagosa (Main) Street, and serve as a model for other communities in Colorado.

Once constructed, the geothermal botanical gardens will consist of three 42-foot greenhouses with outdoor garden beds, pathways and gathering places located at Centennial Park in downtown Pagosa Springs. The multi-purposed Geothermal Greenhouse Partnership park will enhance public green space and advance outdoor activity, agriculture, education, water conservation/efficiency, environment, and community revitalization. Three greenhouses each serve specific operational and mission-oriented purposes:

- The education greenhouse provides a center for K-12 interdisciplinary education with a STEM focus and advanced study in agriculture and renewable energy technologies.
- The commercial innovation greenhouse provides a demonstration site for production of organic crops at high altitudes.
- The community garden greenhouse provides public gardening space and an opportunity for the public to mentor youth and participate in the botanical park.

Initiated by the Mayor of Pagosa and a group of civic leaders, the Geothermal Greenhouse Partnership was conceived in 2009. The driving force behind this project has been a volunteer Board of Directors with volunteer committees responsible for Fundraising, Site Construction, Operations, and Special Events.

In the five years since, many have helped the GPP achieve these key accomplishments:

- Secured the land lease and geothermal water rights from the Town of Pagosa Springs for \$20/year.
- Raised \$125,000 in financial support and significant in-kind donations from
  Davis Engineering, Growing Spaces, Pagosa Verde, Lucero Construction, Town
  of Pagosa Springs, Smith Construction, Red Humpy Website Design, Design by
  Dee, Reynolds and Associates Architects, and former Mayor Ross Aragon.

Received letters of support and/or visits from U.S. Senators Bennett and Udall (Colorado),
 Senator Whitehead (Colorado District 6, 2009-2010), Representative Michael McLachlan
 (Colorado District 59), Senator Roberts (Colorado District 6, 2010-present) U.S. Representative
 Tipton (Colorado District 3, 2010) and Colorado Governor Hickenlooper.

Once operational, salaried positions are anticipated for management, however an active and vibrant Board of Directors and volunteer community will continue to support the GGP.

The project will be completed in three phases:

- Phase I encompasses launch, promotion, partnership development, and capital campaigns. It has been in progress for 5 years and will be completed in 2015.
- Phase II involves site preparation, placement of underground infrastructure and utilities, building the greenhouses, landscaping, and designing and outfitting the interiors of the domes.
   Site preparation and the first greenhouse will be complete in 2015.
- Phase III marks completion of construction and initiation of operation for the three greenhouses and is anticipated to be fully operational in 2017.

The capital to design and build the GGP comes from a combination of private and public grant funding, fundraising campaigns, local sponsorships, and in-kind donations. Once completed, revenue from program activities will provide on-going, sustainable funding for annual operations. Income sources include lease of the commercial innovation greenhouse, product sales, tuition for classes and workshops, sponsorships, annual memberships, and facility use fees. Additional capital campaigns and education grants will be pursued to support program or facility enhancements.

Capital needs for respective phases are: Phase 1 - \$0, Phase 2 - \$500,000, and Phase 3 - \$500,000. Capital raised to date is \$125,000. Significant in-kind support and community good will and volunteerism continues to grow.

The following graphs summarize the financial projections for the GGP including Capital Investment, Operating Revenue, and Net Operating Income. Capital Investment represents money raised for construction of the geothermal botanical gardens. Operating Revenue represents revenue generated from the primary income streams: education, innovation, community, sponsorships, and program contributions. Net Operating Income represents the profit / loss from operational activities. The GGP projects moderate revenue goals beginning in 2015 when operations commence and growth across all five program areas in the first five years of operations.



## **Introduction: The Geothermal Greenhouse Partnership**

### Mission

The Geothermal Greenhouse Partnership's (GGP) mission is to harness intrinsic renewable solar and geothermal energy to grow safe, sustainable, reliable and affordable food for local people, and provide an attraction for visitors, year round. In doing this, the GGP will beautify Centennial Park's River Walk, create educational opportunities, nurture local businesses, create jobs, revitalize downtown, and cultivate economic vitality.

## Vision

By 2017, a geothermal botanical garden will be the centerpiece of Centennial Park in downtown Pagosa Springs. Three 42-foot diameter greenhouses with gardens and public spaces will host:

- A center for education encompassing K-12 STEM education, life-long learning, and advanced studies in sustainable agriculture and renewable technology;
- A center for commercial innovation in growing organic crops at high altitude using a geothermal resource;
- A community garden bringing together and serving the residents of Pagosa Springs.

Affordable, organic, locally grown food for the people and businesses will be produced from all three greenhouses. Pagosa Springs will be recognized as a community that re-vitalized itself using its natural and human resources: hard-working dedicated community members and geothermal water and sunlight.

## **Project Benefits**

The GGP will create a range of community benefits including: public park enhancement, sustainable agriculture, education and workforce development, a model of innovation, and local economic development.

Sustainable Agriculture – At an elevation of 7200 feet, a short growing season and generally poor soil, Pagosa Springs is not an ideal location for agriculture, but there is great demand for fresh, organic vegetables. In response, both small markets (Joys and Old Town Market) and large (City Market) offers a selection of organic fruits and vegetables. During the summer, a farmers market also helps meet the local demand. This produce is largely imported from outside of Pagosa Springs, Colorado, and the U.S., making food security and economic leakage a real concern for our community. The GGP increases the agricultural economy of the area by extending the growing season year-round, avoiding the problem of poor soil completely, and taking advantage of geothermal heat.

**Education and Workforce Development** – The educational focus of the project will ensure that the region's youth and adults have the opportunity to gain valuable skills in horticulture, a growing industry. The GGP will train students and visitors about innovations in alternative energy, renewable resources, bio-solids composting, biomass heating, and organic food production, all at high altitude.

**Model of Innovation** - This project will serve as a model and an inspiration to small towns throughout Colorado by demonstrating that fresh produce can be grown year-round in the Rocky Mountains with little or no extra heating in the winter. The project serves as a demonstration site. Community leaders from other towns will benefit from GGP's efforts to re-vitalize the economically challenged local community.

Economic Development – The 2009 Archuleta County Community Development Action Plan named the Geothermal Greenhouse park as high priority in the Colorado Blueprint Integration process. Region 9 Economic Development District identified three economic sectors as regional priorities: Energy, Agriculture and Manufacturing (including food processing). The GGP program design is patterned on this reality. Archuleta County is designated an Enhanced Rural Enterprise Zone by Region 9 and a Strike Force region by U.S. Department of Agriculture. The GGP project was approved as an Enterprise Zone Contribution Project allowing donors to receive tax credits. The opportunities for economic development are many – tourism, local agriculture production, workforce development, job creation, and education. Also, substantially increased tourism opportunities with increased sales tax revenue exist for the area from visitors to the GGP. Numerous Colorado communities enjoy botanical parks and community gardens with educational components.

## **Development Strategy**

The Geothermal Greenhouse Partnership is building Pagosa Springs' botanical park in three phases:

**Phase I** has entailed clarifying the vision, building the organization and vital partnerships, and securing funding. This effort has been driven by a small team of community leaders who believe strongly that our economically challenged small mountain town can be revitalized through the development of our natural resources. Since inception in 2009, the GGP team has developed relationships with local, state and national public and private entities, gained broad consensus in the community for building the GGP vision, and secured resources including capital, land, in-kind commitments, sponsorships, and other crucial partnerships to achieve the vision.

**Phase II** involves construction of the project, which will take place on the 0.7 acres leased from the Town of Pagosa located along the San Juan River and across the river from two of the three geothermal spas in the very core of downtown. The three 42-foot greenhouses are geodesic domes produced by the local manufacturer, Growing Spaces LLC. The greenhouses are made of polycarbonate triangles with a black heating pool and solar controlled fans to regulate temperature. Construction will include foundations and heat exchanger / cooling systems for each dome with the requisite underground utilities. Additional features are extensive landscaping and activity areas, outside garden production areas with walkways, refrigeration units, and a small sustaining retail operation.

**Phase III** involves initiating operations and management of the project including building the sustaining income crucial to our long-term viability. Revenue will be from several different sources including workshops and classes, performance and arts activities, product sales, consulting services, and special events and lease income. A management structure will be established initially with a volunteer team until the projected revenue allows hiring a professional manager(s) to maintain day-to-day operations, marketing, and outreach. A lessee for the commercial dome will also be contracted and will result in additional income, community benefit, and job creation.

## **Key Milestones and Accomplishments**

Significant work has been accomplished towards achieving the vision of the GGP since 2009. An abbreviated list of project milestones by year is provided year-by-year.

## 2009 Achievements

- April: Formed an all-volunteer GGP Project Committee of seven persons established to promote, seek funding for and develop the Geothermal Greenhouse Partnership project and manage the affairs of the project.
- Set up initial fiscal sponsorship relationship with the Southwest Land Alliance.

- April: Ribbon cutting ceremony with Senator Michael Bennett (Colorado) giving a press conference and endorsement of the project.
- December: Signed an agreement with the Town of Pagosa Springs for a 10 year lease on 1.83 acres of land to be used for developing the GGP. (\$10 / year)
- December: Signed an agreement with the town of Pagosa Springs for 100 gallons per minute (gpm) of geothermal water rights. (\$10/ year)

## **2010 Achievements**

- Received letters of support and/or visits from U.S. Senator Udall (Colorado), Senator Whitehead (Colorado District 6, 2009-2010), Senator Roberts (Colorado District 6, 2010-) Representative Tipton (Colorado District 3, 2010) and Colorado Governor Hickenlooper.
- September: Arranged for a visit to Pagosa Springs by Dr. John Lund of the National Renewable Energy Labs of Golden, Colorado and Gerry Huttrer, Geothermal Geologist and Principle of Geothermal Management Company, Inc. of Frisco, Colorado; Their purpose: a first look at the Pagosa Springs geothermal resource; Lund and Huttrer produced a report in which the authors hypothesized that the resource is much larger than generally recognized and could support further development.
- The GGP was instrumental in promoting the creation of a community-based organization interested in the development of the Pagosa Springs geothermal resource. Results: formation of the Pagosa Geothermal Advisory group consisting of major stakeholders and community members.

#### **2011 Achievements**

- May: Community presentation on progress of the GGP project.
- July: Instrumental in the promotion of A Work Plan to scientifically substantiate the extent of the Pagosa Springs Geothermal resource. Results: agreement by Pagosa Town Council, the Archuleta Board of County Commissioners, the Pagosa Springs Community Development Corporation, the Pagosa Geothermal Advisory groups and the GGP to fund the study.
- July: Through private contributions raised the public portion of the cost for the Work Plan.
- October 6: Host to the Governor's Geothermal Working Group Conference; walking tour of
  geothermal sites in the morning and presentations in the afternoon: Emerging Geothermal
  Opportunities in Archuleta County & Colorado, Jerry Smith, Pagosa Verde; Pagosa Springs Work
  Plan for Direct Use Geothermal Analysis, Gerry Huttrer, Geothermal Management Co., Inc.
  Regional Geothermal Aquifer Testing & Environmental Considerations, Dr. Eric Klingel, Terranear

PMC & Just Hot Resources; Geothermal Exploration, Processes & Partnerships, Jim Hanson, Just Hot Resources; and Binary Power Generation Technology, Halley Dickey, Turbine Air Systems.

## **2012 Achievements**

- February: Received a \$25,000 grant from the Laura Jane Musser Foundation to complete the engineering design plans.
- May: Hosted first Colorado School of Mines field camp to study the extent of the geothermal aquifer.
- June 30: First Annual Geothermal Partnership Celebration and Fundraiser at the Community Center.
- October: Received Non-Profit exempt status from the IRS. As an independent 501(c)(3) organization dissolved fiscal sponsorship relationship with the Southwest Land Alliance.

#### 2013 Achievements

- Selected by the Colorado Environmental Film Festival as one of four Colorado sites to host a mini-festival using their award winning films for our own fundraising purposes.
- May: hosted second Colorado School of Mines field camp to research geothermal resources.
- July: hosted 1<sup>st</sup> GGP Environmental Film Festival.
- The GGP Signed a Professional Services Agreement with Davis Engineering for completion of Design Engineering Plans. Plans to be completed by April 2014.
- Town of Pagosa Springs donated \$25K to the GGP to serve as matching funds for future grants.

#### **2014 Achievements**

- March: \$25K received for water infrastructure from the San Juan Basin Water Roundtable and \$50K from Colorado Water Conservation Board.
- May: hosted third Colorado School of Mines field camp to measure geothermal resource.
- May: Gov. John Hickenlooper signed renewable energy bonding bill HB-1222 in a ceremony on the GGP site in Centennial Park.
- May: The GGP project was named at Senator Udall's Energy Summit in Golden.
- August: GGP co-sponsored four Greenhouse Gardening Workshops organized by CSU Extension.

- August: Consulted on GGP site with Colorado Department of Agriculture representative.
- August: GGP co-sponsored the third Pagosa Verde Symposium.
- September: Hosted second Colorado Environmental Film Festival Caravan in collaboration with the USFS San Juan Ranger District to celebrate the 50<sup>th</sup> Anniversary of the America's Wilderness Act.
- September: Unanimous endorsement by Pagosa Springs Parks and Recreation Commission for ToPS to submit a DoLA Energy Impact Assistance grant application in partnership with the GGP.

## **Marketing Outreach**

Marketing outreach involves several strategies, evolving over time. Accomplishments, strategies, and plans are described below.

**Initial Community and Public Outreach** - The initial stage has already been accomplished over the last five years through many different avenues. This outreach includes articles in local and regional media, the website, a Facebook page, informational brochures, support from community leaders and state officials, and numerous public meetings soliciting public input.

**Capital Campaign** - Levels of funding/financial support has been and will be sought from local, regional, and statewide organizations and foundations, philanthropists, community-oriented individuals, local businesses, and local and state government.

**Volunteer Development:** – Board members have moved the project forward and overseen the development of volunteer committees to accomplish the following tasks:

- Fundraising promotional events, programming, sponsorships, and grant writing
- Site engineering, construction, landscaping, interior & exterior
- Operations management, outreach, education, marketing
- Special Events production of Colorado Environmental Film Festival Caravan, publicity, coordinates with Fundraising for community attractions, membership gala

## Construction

Construction involves site preparation, building the three greenhouses with interior systems, and exterior hardscape. The scope of activities for preparation encompass providing: geothermal hot water to create a suitable climate for winter gardening; irrigation water; and potable water.

When underground infrastructure is completed and greenhouses are constructed, the interior systems will feature three geothermal / solar heating and cooling systems to create optimum growing conditions for year round gardening and temperature stabilization. These include in-ground heating for winter growing, radiators for heating / cooling, and heat exchange coils in the water tank for heating / cooling according to season. Other systems include irrigation, sprinkler and misting systems. When fully operational, the heating, cooling, irrigation and misting systems will be integrated to optimize plant yields while minimizing water consumption. These systems will be monitored and recorded to provide valuable information for comparable projects.

## **Operations**

Each of the three greenhouse management plans are based on their respective operations: education, economic innovation, and community gardens. Each greenhouse provides over 1,300 square feet of interior growing space.

#### **Education Greenhouse**

Archuleta School District 50-Jt and Colorado State University Extension Services have committed to using the first greenhouse. There are numerous possibilities of how this greenhouse could be used for educational benefit. Flexibility and adaptability in interior layout will maximize students' hands-on experiences. An efficient use of space will maintain openness allowing classrooms of students to move around freely. A work area with a table large enough for several students, a storage area for supplies, and a sink with potable water are planned.

Some areas will have permanent growing beds and others will be open for use for short-term student projects that require unconventional planter beds. Learning activities incorporate composting and vermiculture closing the loop of nutrients and teach youth about the cycle of birth, life and decomposition.

Using all the space available including vertical space will be accomplished in many ways including: multi-level plantings with taller varieties; mid-level and low-growing varieties all using the same space; and encouraging vertical growth with trellises and the use of hanging baskets and pots. A permanently planted area may include fruit trees and other appropriate perennial shrubs and/or vines. The water tank, thermal mass to aid in temperature regulation, is also suitable for other classroom projects: fish production for food, aquatic plant and insect studies, providing nutrient rich water for watering plants.

### **Commercial Innovation Greenhouse**

The lessee of the commercial innovation greenhouse will be given the freedom to design the interior to fit specific production needs and business plan. The current plan is to offer the lessee either a totally empty space with only the geothermal water and other utilities stubbed into the dome, or some level of infrastructure such as water tank and geothermal distribution already plumbed into dome. The GGP

could participate at whatever level the organization feels appropriate in preparing the interior of the dome or leave that totally as the responsibility of the business leasing the dome.

The interior design must be approved by the GGP Board of Directors to insure the greenhouse's buildout fits into the vision of the project as a whole, including, but not limited to, sustainable growing practices such as using organic pest control and organic fertilizers. Outside of achieving the GGP's mission and vision, our goal is to support the commercial lessee so that business goals are met.

## **Community Gardens Greenhouse**

The community gardens greenhouse offers opportunities for broad community benefit and beautification. The GGP envisions a cooperative and positive community-oriented atmosphere. A common area with seating among trees, shrubs and perennials will provide a place for gathering. Individuals and groups, civic and service organizations, and/or churches may grow in these beds. Each grower or group of growers must agree to mentor youth in order to participate. The ultimate community will be determined as the project evolves and the community is further engaged in this greenhouse's use. We anticipate a collaborative approach fostering the success of this greenhouse. Opportunities for supporters to volunteer and serve the Pagosa Springs community abound in the GGP park operations.

## **Management Team and Staffing**

## **Board of Directors**

The GGP has attracted and retained a talented group of civic leaders to initiate, organize, and develop this project. A list of the board members is provided below with bios of the leadership team:

- Ross Aragon, Chair
- Sally High, Vice Chair
- Kathy Keyes, Secretary
- Bob Lynch, Treasurer
- Pauline Benetti, At Large
- Don Coughlin, At Large
- Mark Mueller, At Large
- Courtney King, At Large
- Roberta Tolan, At-Large

Ross Aragon is the former mayor of Pagosa Springs and holds the record for being the longest serving town trustee and mayor in the history of Colorado. Ross was born and raised on a ranch near Arboles and Allison, part of a family whose roots in Pagosa Country go back five generations. He graduated from Pagosa Springs High School and he has remained in the area all of his life. Since the position of mayor had been a voluntary one, Aragon's day job since 1975 has been as the manager of the Archuleta Housing Corporation, which provides low-cost housing in the community. Ross is committed to development of the local economy and believes the GGP provides countless benefits to the Town of Pagosa Springs and Archuleta County.

Sally High, M.Ed., received the Presidential Innovation Award for Environmental Educators (2012) and was named an eCycleBest Top Five Green Teachers in the nation (2014). She recently ended a 25-year teaching career to focus on community development. Sally serves on the Colorado Environmental Education Leadership Council, Colorado State University Extension Advisory Board for Archuleta County, Pagosa Springs Parks and Recreation Commission, Southwest Workforce Development Board and Geothermal Greenhouse Partnership Inc. Sally works closely with greenhouse growers through her membership with the Colorado Nursery and Greenhouse Association. She is a co-founder of Pagosa Verde, LLC. Sally recognizes tremendous potential for education and economic development when the GGP park is operational.

**Kathy Keyes** is a founding member of the Geothermal Greenhouse Partnership, owner and founder of Pagosa Baking Company, and is past president of the Pagosa Springs Area Chamber of Commerce. Kathy sees local economic diversification as of utmost importance to her business and community, and believes development of Pagosa's geothermal water resource is the opportunity to create a broader based economy founded on principles of sustainability and renewable energy.

**Bob Lynch** has a wide range of business experience and community involvement in Pagosa. As a graduate of Fort Lewis College and Drake University, Bob began his career as a psychologist working with young people. His career path led to the application of psychological principles to the workplace. Bob is the author of four books on team management, employee engagement, and leadership and has worked with Fortune 500 companies in the US and Internationally as a consultant, instructor and executive coach. When in Pagosa, he manages the family cattle ranching operation which has focused on implementing sustainable agricultural practices and producing grass-fed beef over the past 15 years. In the community, Bob has served on the county Planning Commission and was recently elected to the Board of Directors of LaPlata Electric association. Bob was raised in Pagosa and has a family tree that descends from the first settlers in Archuleta County.

Pauline Benetti is a five year member of the Geothermal Greenhouse Partnership Board of Directors. She brings her academic preparation (University of California at Berkeley) and work experience (Hewlett-Packard Corp.) to bear on writing successful grant proposals for the GGP and for the Ross Aragon Community Center. Since retirement to Pagosa in 2000, Pauline has devoted energy to promoting sustainability issues in our community through her work with the GGP, the Southwest Organization for Sustainability (SOS) and the Pagosa Farmers Market where she sells alpaca fiber and

products from her livestock. She is also president of the Pagosa Unitarian Universalist Fellowship Steering Committee.

**Don Coughlin** attended Fullerton Community College, Cal. State Fullerton, and pursued studies in Biology, Botany and Native Plant Propagation. He has a wholesale nursery experience as grower for 15 years and is employed at Growing Spaces, in sales, fabrication, and installation of Growing Domes for the past five years. He is a volunteer educator at the Four Mile Ranch Environmental Education Program (K-4) and a Colorado master gardener with organic gardening experience for 30 years. He serves on the Weminuche Audubon Society Board of Directors and leads regular bird walks in Pagosa Springs and Durango. He is active on the committee for the Pagosa Springs Community Composting project.

Mark Mueller has lived in Pagosa Springs for 22 years and works for the state of Colorado as a snow avalanche hazard forecaster in the winter for the Colorado Avalanche Information Center. He owns and operates Wolf Creek Backcountry, providing year-round yurt based adventures and avalanche safety education in the Rio Grande National Forest. Mark recently retired after twelve years as Executive Director and business manager for the American Avalanche Association, a Utah based non-profit corporation representing the interests of US avalanche workers and researchers. Don brings valuable experience in nonprofit administration at a national level.

Courtney King, RA, LEED AP BD+C, is a licensed Architect and a Green Building Professional with fifteen years of experience in sustainable design and construction. Courtney brings to her work a knowledge of natural construction and the LEED Green Building Rating System, as well as practices of positive environmental impact or biophilic design. From 2007-2010 Courtney served as the President of the Board of Directors for Colorado Housing Inc., a non-profit organization providing self-help housing solutions in Southwest Colorado, where she led the effort of developing affordable, practical, and appropriate strategies for sustainability. She has also been actively engaged in the development of design guidelines and the planning of Pagosa Springs, Colorado by serving on the Downtown Master Plan and Way-finding/Signage Steering Committees.

Roberta Tolan is the Colorado State University Extension Agent for Archuleta County where she develops educational programs in agriculture, horticulture and natural resources, youth development, energy and community development. Prior to this position, she was the Horticulture Extension Agent in Larimer County for seven years, the Director of Education for the Denver Botanic Gardens and the Executive Director of Quarry Hill Nature Center in Rochester, MN. Roberta's first career was in marketing and advertising and she holds a MS in Landscape Horticulture from Colorado State University, an MBA in Marketing from Georgia State University and a BS in Marketing from the University of Illinois, Urbana.

## **Volunteer Committees**

Until such time as the GGP project is assured of a consistent and an adequate income stream to support paid staff, management of the project will be accomplished through volunteer talent and effort. This includes four current committees. Each committee is overseen by at least one Director. Current committees are Fundraising, Site, Operations and Special Events.

#### Salaried Staff

Once operations begin and income is available to hire staff, a full-time staff is planned for operations, management, outreach, and marketing. A manager will ensure smooth running of day-to-day tasks as well as maintenance and organization of future projects and events. The manager will also coordinate with and work in concert with the education and administration teams.

## **Financials**

#### Overview

The capital to design and build the GGP comes from a combination of grant funding, fundraising campaigns, local sponsorships, and in-kind donations. Once completed, revenue from program activities will provide on-going and sustainable. Income sources include lease of the commercial innovation dome, product sales, tuition for workshops and classes, sponsorships, annual memberships, and facility use fees. Additional capital campaigns and grants will be pursued to support program or facility enhancements.

## **Capitalization Needs**

Overall capital needs for construction of the project are projected to be approximately \$1,100,000. Capital needs for respective Phases are: Phase 1 - \$000, Phase 2 - \$500,000, and Phase 3 - \$500,000. Capital raised to date is \$125,000. Significant in-kind support and community good will and volunteerism continues to grow. Following construction, cash flow from operations and additional grants for program funds will be used to sustain ongoing operations as described below.

## **Donors and Members**

In the third quarter of 2014, with matching funds secured and several grant applications submitted, GGP supporters are confident that construction will commence in Spring 2015. The timing is right for beginning a Private Donor Program and a Membership Program.

Proposed levels of Donor Sponsorships range from \$250 to 15,000 or more. Donors receive tax deductions and any donation over \$250 also qualifies for an added 25% Enterprise Zone deduction. Donors above the \$250 level also receive a complimentary annual membership.

Annual membership is \$50. Because members receive value, for example admission to special events or discounted workshops, membership is not tax deductible. A membership campaign will begin in late October. The outreach may incorporate a "crowd-funding" approach and a challenge to match private donations.

## **Ongoing Operations**

- 1. Production and sales of high-value vegetables and herbs. Target markets include year-round framers market, restaurants, retail groceries and the Senior Center. The GGP may establish a relationship with the School District Food Services through the USDA Farm to School Program.
- 2. Year-round hands-on classes and workshops for locals and eco-tourists on site or through field trips.
- 3. Year-round outdoor activities in coordination with existing providers may include organized hiking, cross-country skiing, snowshoeing, rafting, wildlife identification, and/or fishing instruction.
- 4. Retail sales may include t-shirts, caps, books, DVD's, posters, seeds, plants, and numerous other GGP branded items.
- 5. Consulting and training services may include replication of the GGP model in other communities.
- 6. Educator training may involve hosting various agency trainers and holding classes at the GGP park. Trainers may include the Colorado Environmental Education Leadership Council, Colorado Forest Service Project Learning Tree, the United States Forest Service, Mountain Studies Institute, and numerous other providers.
- 7. Park activities, indoor or outside, may include Art in the Park, Performance in the Park, Music in the Park, Yoga, Tai Chi, Chefs in the Garden, Film in the Park.
- 8. Colorado Environmental Film Festival Caravan is an annual film festival in cooperation with the CEFF in Golden, CO. The Geothermal Greenhouse Partnership will host the third annual Film Fest Caravan in 2015 and build the arts event into a profitable fundraiser.

## **Potential Sources of Grant Funding**

The following is a (nonexclusive) list of funding avenues for which the GGP qualifies, as an educational 501(c)(3). As needed and appropriate, the GGP will pursue these organizations for program funding.

- In 2014 the Environmental Protection Agency offered as many as 32 Environmental Education organizations grants of as much as \$200,000. The EE funds are designated to exponentially educate the public. This means that a recipient educates teachers or mentors who will educate others and pass along information and integrated skills. In years past, the EPA's Environmental Education grants have been an annual offering.

  http://www.epa.gov/education/environe=mental-education-ee-grants
- The GGP has professional representation on the Colorado Alliance for Environmental Education and the Colorado Environmental Education Leadership Council. The organizations function as networks for program funding, once the GGP park is constructed. <a href="http://www.caee.org">http://www.caee.org</a>

- CAEE is affiliated with the National Environmental Education Foundation, a funder of several Colorado EE programs. Link here to see a menu of EE grant program possibilities. <a href="http://www.neefusa.org/grants/index.htm">http://www.neefusa.org/grants/index.htm</a>
- Project Learning Tree, administered by the Colorado State Forest Service, gives EE program
  grants each year of \$5,000 to \$15,000. More than one project can be funded by PLT funds each
  year. They also provide extensive and high-quality curricula and teaching materials.
  http://www.coloradoplt.org
- Colorado State University Extension offers an array of hands-on STEM materials to EE teachers
  in formal and non-formal education roles. Archuleta County CSU Extension is eager to partner
  with the GGP in educational efforts. http://www.archuleta.colostate.edu
- Colorado Environmental Film Festival and the GGP first partnered in 2013 to produce the CEFF
   Caravan in Pagosa Springs to benefit the GGP. The second collaborative Film Festival was in 2014
   and CEFF is eager to pursue future benefits on behalf of the GGP. http://www.ceff.net
- The Kitchen Community Learning Garden program is based in Boulder, Colorado. Their grants
  offer school-affiliated gardening projects assistance in building and teaching in a "Learning
  Garden," like the GGP is building in Centennial Park. http://www.thekitchencommunity.org
- The Colorado Nursery and Greenhouse Association's membership donates seeds and plants to member nonprofits that promote horticultural and environmental skills and appreciation. <a href="http://www.cnga.com">http://www.cnga.com</a>
- The Colorado Garden Foundation promotes horticultural skills and advances gardening through annual grants to teaching nonprofits of up to \$100,000.
   <a href="http://www.coloradogardenfoundation.org">http://www.coloradogardenfoundation.org</a>
- http://www.captainplanetfoundation.org/apply-for-grants
- http://www.greenschools.net
- http://www.coloradocollaboration.org
- http://www.ngcproject.org/collaborative/colorado-collaborative-girls-stem-cocostem
- http://www.livewellcolorado.org/healthy-living/be-part-of-the-solution/funding-opportunities
- http://www.coloradotrees.org
- http://cpw.state.co.us/aboutus/Pages/TrailsGrantsSummaryList.aspx
- http://www.kresge.org/programs/environment

- <a href="http://www/elpomar.org">http://www/elpomar.org</a>
- <a href="https://bfi.org/challenge/apply">https://bfi.org/challenge/apply</a>
- GGP research into appropriate funding for the horticultural park is ongoing.