

The Mysterious Greenhouse Project, Part One

Bill Hudson | 4/16/09

Checking my email the other day, I found a simple but colorful invitation to attend a "ribbon-cutting" ceremony at Centennial Park, in downtown Pagosa Springs.

The ceremony was to be held Thursday, April 16 — that's today — at noon, the invitation said. But it didn't say much more than that, except to state, rather ambitiously, "Opening in September." *Continued...*



My wife Clarissa and I spent several lunch hours in Centennial Park last summer. Clarissa loved to stop by Pagosa Baking Company and pick up a couple of their Portobello mushroom sandwiches with a side of Quinoa salad. We'd ride our bikes down to Centennial Park and eat lunch at one of the picnic tables, listening to the San Juan River and discussing the day's business. Across the river, heavy machinery was preparing the site for a new 29-room hotel the Springs Resort was about to build.

We rarely saw anyone in the park during those lunches. Occasionally, we'd see a fisherman casting on the other side of the willows. Once in a while, a local resident would stroll by, perhaps taking a pet dog for his daily walk.

At the west end of the park, just past the geothermal water outlet, a small group of downtown gardeners had created a "community garden," a dozen or so modest little individual garden plots delineated by round river rocks and sprouting a mix of flowers and vegetables. A small shed held some gardening tools, and rarely we'd see one of the community gardeners tending their plot.

Clarissa and I had tried our hand at gardening in years past, in our own back yard a few blocks away from Centennial Park. We'd found the effort extremely challenging. Pagosa Springs has some of the most pleasant weather in the Southwest – for human beings. But vegetables don't always fare well in outdoor gardens here. Our short growing season, with its late start and deadly nighttime frosts at either end of the season, discourages many potential gardeners. One year, we lost almost everything in the garden to a frost on July 3. Most years, our tomato plants were killed by frost before the fruit had a chance to fully ripen.

We learned to eat fried green tomatoes.

The colorful email that arrived last weekend was sent out by Kathy Keyes, the owner of the Pagosa Baking Company. As I mentioned, the invite didn't say much, just the time and place of the ribbon-cutting hosted by the "Geothermal Greenhouse Partnership," of which Keyes is a member. And it also included some curiously Oriental-looking symbols, and five words:

Solar.

Community.

Greenhouse.

Permaculture.

Geothermal.

Then, a few days later, Keyes sent us a short press release:

The Geothermal Greenhouse Partnership will hold the Ground Breaking Ceremony for the Geothermal Greenhouse Project at noon on Thursday April 16, 2009 in Pagosa Springs's Centennial Park. Mayor Aragon and members of the Geothermal Greenhouse Partnership committee will make a presentation about this community project, and introduce all our local partners.

This community project will be a showcase for the alternative energy resources of our community and the viability of putting those resources to commercial use; provide a local source of fresh, organic produce to local businesses and residents; provide an educational resource for regional schools and adult groups on topics of alternative energy, renewable resources and organic permaculture; and serve as an economic driver for our rural community by being a tourist attraction and an attraction for other alternative energy and permaculture-related businesses.

Ross Aragon, Pagosa's mayor, has been promoting the idea of a geothermal greenhouse for at least the past year. Last summer, when the Springs Resort began seriously pushing the Town Council to increase the amount of geothermal water provided to the resort from the Town's PS-5 geothermal well, Town Council member Angela Atkinson had urged the Town to clarify its intentions for a geothermal greenhouse before making a final decision on the Springs Resort proposal.

Acting Town Manager Tamra Allen had suggested, then, that a geothermal greenhouse project might use as much as 100 gallons per minute — a sizable portion of the Town's 450 GPM geothermal water right.

As it panned out, the Springs Resort pulled their request for more water about the same time that the Town Council approved a very vague resolution referencing Aragon's greenhouse project. The Council passed a resolution, dedicating 100 GPM of the Town's geothermal water to be used for some type of geothermal greenhouse operation in downtown Pagosa — probably in Centennial Park, where the Town's well is located.

The water the Springs Resort had been asking for in its negotiations had been so-called "waste water" from the Town's municipal geothermal heating system, a wintertime hot water delivery system that serves numerous downtown businesses and government buildings, including three schools. The resort wanted the water, after it finished running through the Town's heat exchanger, because it still had considerable heat value — coming out as "waste water" at about 120 degrees — and of course, it still contained all the "therapeutic healing minerals" for which the Pagosa Hot Spring is famous.

A geothermal greenhouse, on the other hand, would not need the sulphur-smelling minerals from the Town's waste water — it would need only the water's heat value.

And it would need the heat value only during the wintertime, during the months when our local motels and resorts experience a slowdown in tourist traffic.

Typically, greenhouses are built to collect their own solar heat during the milder parts of the year — and many greenhouses never use any kind of supplemental heat, because they are not normally used during the winter months. In fact, some greenhouse experts recommend shutting down a greenhouse during the winter, to allow nature's natural freezing process to kill off insects and other pests — and their eggs.

No greenhouse should need supplemental heat in the summer months — rather, they normally need an efficient cooling system to combat overheating.

So it's not clear exactly what the Town Council had in mind when it dedicated 100 GPM of its geothermal water to a geothermal greenhouse project.

Maybe I would find out more, if I attended the ribbon-cutting ceremony in Centennial Park today?

But from what I had heard during interviews with a couple of the Partnership members — with project manager Tamra Allen and with Kathy Keyes — a lot of the project details were far from finalized, in spite of today's ribbon-cutting ceremony.

Maybe no one — not even the project organizers — really knew yet what this project might eventually mean to Pagosa Springs, or how, exactly, it would utilize the Town's geothermal water.

Even less clear, perhaps, was how the project would utilize — and serve — the "Community."

The Mysterious Greenhouse Project, Part Two

Bill Hudson | 4/17/09

The Geothermal Greenhouse Partnership has a friend in the U.S. House of Representatives: John Salazar. I've never personally met Mr. Salazar — the older brother of Colorado's former U.S. Senator Ken Salazar, who was recently appointed Interior Secretary in the Obama administration — but from what I can gather, John Salazar sees himself as a champion of rural America.

Here is the introductory statement from Congressman John Salazar's website:

“For me, the right choice is always the one that rings true with rural values — honoring personal sacrifices, keeping our commitment to working families, rewarding hard work, honesty, and integrity. If we do not keep our promises, our words have no value.”

The website goes on:

“Salazar is dedicated to defending rural values and ensuring that the government keeps its promises to the people. Now in his third term, Congressman Salazar comes to Congress after serving in the Colorado State Assembly, where he gained recognition for protecting rural water ...

“Raised on a farm where he shared a bedroom with five siblings, with no running water or electricity, Congressman Salazar understands what it means to count your pennies and work with a tight budget. He is an

outspoken advocate for fiscal responsibility and will work to reduce the deficit, making sure that money is spent wisely and where it matters most ...

“Congressman Salazar’s appointment to the powerful House Committee on Appropriations in the 111th Congress is a victory for Colorado.”

Congressman Salazar seems to agree with Pagosa Springs mayor Ross Aragon and the rest of the Geothermal Greenhouse Partnership steering committee — that it would be wise to spend our precious federal tax dollars on the mayor’s proposed greenhouse project in downtown Pagosa Springs.

The Geothermal Greenhouse project made it onto Salazar’s short list of nineteen funding requests for the Transportation and Housing and Urban Development Appropriations bill:

“Geothermal Greenhouse Partnership Project

\$265,800

Southwest Land Alliance

450 Lewis Street, Suite 3A

Pagosa Springs, CO 81147

“Explanation: The Project consists of three to five greenhouses powered and heated by renewable energy sources located in the center of the Town of Pagosa Springs. It will showcase to the nation how an economically devastated, rural mountain community can come together and creatively diversify and utilize its alternative energy resources to stimulate its economy. This Project supports local agriculture and local small businesses while creating more jobs in the community, which are additional priorities of the current Administration.”

Southwest Land Alliance’s greenhouse proposal sits about halfway down Salazar’s list, standing out as a bit of a “green thumb” among bridge replacement projects, road resurfacing projects, airport runway projects, and one “housing assistance program.”

How, exactly, an innovative geothermal greenhouse project fits into a “Transportation and Housing and Urban Development Appropriations bill,” only the politicians in Washington will ever know, I suppose. But there it is, nevertheless. Whether this federal appropriation request by Southwest Land Alliance — the local land conservation non-profit which is serving as “fiscal agent” for the Geothermal Greenhouse Partnership — will actually get funded is still an open question.

Another unanswered question is: what, exactly, would the federal government be funding?

We can all grant that Pagosa Springs, Colorado is indeed, as Congressman Salazar claims, an “economically devastated, rural mountain community.” Whether that community can “come together and creatively diversify and utilize its alternative energy resources to stimulate its economy” under the leadership of long-time mayor Ross Aragon is perhaps more difficult to predict, based on past history.

The Town of Pagosa Springs first got into the geothermal business in the early 1980s, just as America was beginning to get serious about alternative energy resources following the Arab oil embargoes of the 1970s.

Developing alternative energy resources in a innovate way is, as the town discovered, a tricky business. And what the Town was proposing — the construction of a municipal heating system, using “free” geothermal water from underground wells to heat government buildings, businesses and residences in the downtown area — was pretty innovative back then.

First off, the Town had to make peace with the local businesses which already had geothermal water rights and who were afraid the Town municipal heating project might deplete the resource. That required thousands of dollars spent to study the geothermal aquifer and to negotiate with other water rights holders.

Then the Town had to please the state of Colorado, and its water resources bureaucracy – a department committed to prevent damage to the state’s water resources, and to fair distribution of water to all users based on a seniority system.

Lawsuits from that first municipal adventure into geothermal heating are still being settled.

Then we had the engineering and delivery problems to solve. The

Ross Aragon was the town’s new mayor back in the early 1980s, while the Town struggled to resolve the political and construction snags inherent in developing an innovative alternative energy system.

That innovative municipal heating system, unfortunately, is yet to be fully developed, nearly thirty years after the project was begun. According to some sources at least, the Town of Pagosa Springs municipal geothermal heating system is significantly underutilized. Investments into upgrading the heat exchanger and distribution pipeline might be able to double number of downtown customers, using the Town's existing water rights.

Would such upgrades enhance life in an “economically devastated, rural mountain community?” Apparently, not nearly as much as a new, innovate geothermal greenhouse project would.

But we are still not clear. Who is the Geothermal Greenhouse Partnership, and what are they proposing to do for Pagosa Springs?

It seems they don’t really know, yet, themselves — even though they are already soliciting federal Transportation and Housing funding, and being sponsored by a hard-working, honest champion of rural America.

The Mysterious Greenhouse Project, Part Three

Bill Hudson | 4/20/09

When I arrived at Centennial Park — a delightful little acre of lawn and trees on the edge of the San Juan River, directly behind the County jail — a couple of handfuls early birds were already milling around the “audience” area of the park, making conversation and introducing themselves to other audience members.

It was Thursday, April 16, and we were about 15 minutes early for the scheduled noon “ribbon cutting ceremony” for the new — and still mysterious — Geothermal Greenhouse Project.

The “stage” area on the lawn, from where mayor Ross Aragon and his supporters would be making their noon speeches, had been defined by four things: two eight-foot tall vertical banners, a Peavey PA system, and a little pile of dirt with a little gold-painted shovel poked into it.

I set up my tripod and then grabbed Pagosa Baking Company owner Kathy Keyes out of the gathering crowd, so she could tell me a little about the “geodesic dome greenhouse cookies” that were sitting in tray on a nearby table. From the cookies and the comments made later, it became fairly clear that the Geothermal Greenhouse Partnership had settled on using the locally-manufactured “Growing Spaces” greenhouses for this mysterious project. In fact, maybe a quarter of the crowd that finally formed in front of the stage appeared to consist of “Growing Spaces” employees, “Growing Spaces” greenhouse owners, and their friends.

Click here to [view the Daily Post video](#) of last Thursday’s ceremony.

As the noon hour arrived, maybe thirty-five or so people had gathered for the advertised “ribbon cutting ceremony.” It was apparent, looking at the stage setup, that we would be witnessing, not a ribbon cutting, but rather a “groundbreaking” of sorts. I usually think of a ribbon cutting happening out in front of the new business’ front doors, on the day they open for business. A groundbreaking, on the other hand, normally happens when the business has raised the necessary capital and is ready to begin construction.

This mysterious event, however, celebrated none of those things. The Geothermal Greenhouse Partnership — consisting of Pagosa Springs mayor Ross Aragon and his hand-picked partnership members, Michael Whiting, Tamra Allen, Kathy Keyes, Sheila Berger, and Rick Bellis — has yet to raise any significant capital, as far as I know, and are certainly far from opening their doors for business.

And what a mysterious business it appears to be.

Mayor Aragon started the festivities off by telling the crowd he was disappointed in the turnout.

“I’m a little bit disappointed ... [Town Parks director] Jim Miller told me that I would be addressing multitudes of people today.” Then the mayor changed direction and excused the small turnout by laying the blame on the two inches of snow that had blanketed the park lawn earlier that morning. *Continued...*





Aragon then told the crowd that this project was all about “community.”

“The thing that I really want to hammer on today is, this is about the community. It’s not about the Town, the County, me, or anyone else. It’s about the community. It’s a community endeavor. I just don’t — I can’t emphasize enough how important it is that we look at it that way — that it’s about all of us.”

In fact, however, the Geothermal Greenhouse Partnership has so far been a rather private club. As far as I know, they have not yet held a single public meeting to invite community input on the partnership’s proposed use of two Town-owned resources — the Town’s geothermal water rights and the Centennial Park — for the project. Although a few businesses and government agencies have donated staff time to the project — Pagosa Area Water and Sanitation (PAWSD) has donated their special projects coordinator, Sheila Berger, as a grant writer, and Archuleta County has donated staff time of their Community Development director Rick Bellis — the project has seemingly been reluctant, so far, to try and elicit widespread community support, as evidenced by the small turnout at Thursday’s noon ceremony.

I noticed, in particular, when examining the crowd that had shown up, that several groups were conspicuous by their absence. Although the Town of Pagosa Springs is donating the geothermal water and the park acreage for this mysterious project, I counted a total of maybe six downtown residents in the crowd — one being the mayor himself and another being the partnership’s project manager, Tamra Allen.

Two others were *Daily Post* photographer Glenn Walsh, and myself.

Also conspicuously absent were the other six Town Council members who serve with Ross Aragon and who voted to commit Town water rights to the project. I saw no one from PAWSD except Sheila Berger. Bob Hart of Hart Construction, who early on in the planning process offered to donate dirt work for the project, was missing.

Also missing on Thursday was a presentation of a definite plan for what, exactly, the Partnership hoped to build, or any cost estimate of what it will cost, or any clear idea where the money would come from.

As the mayor stated, twice, this was the first step of a “thousand mile journey.” It did indeed appear that the ultimate goal was far away. Even the decision about what the final goal might be — other than some vague references to community involvement and increased tourism and jobs — seemed far away.

“To do something like this,” Aragon continued, “I realize it’s going to take a lot of us. But there was got to be a lead [group.] And the lead in this case is composed of some of the smartest and hardest working people that I know in the community.” Aragon then introduced Berger, Keyes, Allen and Bellis, and last but not least, the director of the Southwest Land Alliance, Michael Whiting.

“.. and of course, the man with the galvanized tonsils .. uh ... “ The mayor then stumbled on his words, mispronouncing Whiting’s last name — and then correcting himself as Whiting whispered the correct pronunciation.

The mayor is quite accurate in extolling this particular group as five of the smartest and hardest working people in the county. But i don’t believe any one of them has ever operated a community greenhouse, let alone a community greenhouse complex that will be simultaneously a tourist attraction, a demonstration business venture focused on alternative energy, an educational resource for school children and a thriving source of food for the local community.

Running any one of the those types of businesses would be a difficult proposition in Pagosa's current struggling economy. But this partnership apparently intends to accomplish all of those goals, without any local government funding?

Michael Whiting then took the microphone and assured the gathered crowd that the Geothermal Greenhouse Partnership would make excellent use of the community’s three most valuable renewable resources — the region’s abundant sunshine, the Town’s geothermal water, and “the people, and that’s probably our most valuable renewable resource.” He then referred to the gathered crowd as “a pretty good example of that resource, sort of bubbling up the way the geothermal water does.”

Whiting didn’t mention that the geothermal water no longer “bubbles up” the way it once did, before the Town of Pagosa Springs installed their two wells to extract geothermal water for a downtown municipal heating system. According to the owners of the Spa Motel — a business that has been using the geothermal water since the early 1930s for its spa operations — the water pressure at their two main wells dropped from 50 pounds pressure down to 17 pounds when the Town began its municipal heating operations. That pressure has never recovered, they told the Town Council at a meeting last year.

But I must admit, the thing that most interests me about the Geothermal Greenhouse Partnership is their claim that they want to build community involvement in this project, coupled with the partnership’s relatively private operations to date.

How do you build community involvement without involving the community? I wanted to know, so I decided to interview two of the partnership members — project manager Tamra Allen, and Pagosa Baking Company’s Kathy Keyes.

The Mysterious Greenhouse Project, Part Four

Bill Hudson | 4/21/09

As Pagosa Springs mayor Ross Aragon noted during his speech at last Thursday’s Geothermal Greenhouse Project (GGP) groundbreaking ceremony, the five people serving on the Geothermal Greenhouse Partnership steering committee are some of the “smartest and hardest working people that I know in the community.”

Those five people would be GGP project manager and former Town of Pagosa Springs planning director Tamra Allen, Pagosa Baking Company owner and former Big Box Task Force member Kathy Keyes, Southwest Land

Alliance executive director Michael Whiting, Archuleta County director of Community Development Rick Bellis, and Pagosa Area Water and Sanitation District special projects director Sheila Berger.

It's plain to see that the project steering committee is heavy on representation from the government and non-profit sector, and light on members from the Pagosa Springs business community.

Add to that, the fact that Bellis, Berger and Whiting are all paid employees for their respective agencies, and we see that the GGP also seems to be light on representation from the volunteer community.

The two members of the committee who seem to be volunteers are Tamra Allen and Kathy Keyes — if you don't include Ross Aragon himself, who has served unpaid as Pagosa's mayor for nearly 30 years.

I had a chance to interview Allen and Keyes, on two separate mornings, prior to the Thursday groundbreaking ceremony. Keyes — who is one of my web design clients and a regular advertiser in the *Daily Post* — had recently sent us an email invitation about the Thursday "ribbon cutting ceremony" (which as noted earlier, did not actually involve the cutting of any ribbon.)

The invitation had included a curious, somewhat Asian looking graphic element highlighting the several key elements of the Geothermal Greenhouse Project. Those elements were:

Solar.

Community.

Greenhouse.

Permaculture.

Geothermal.

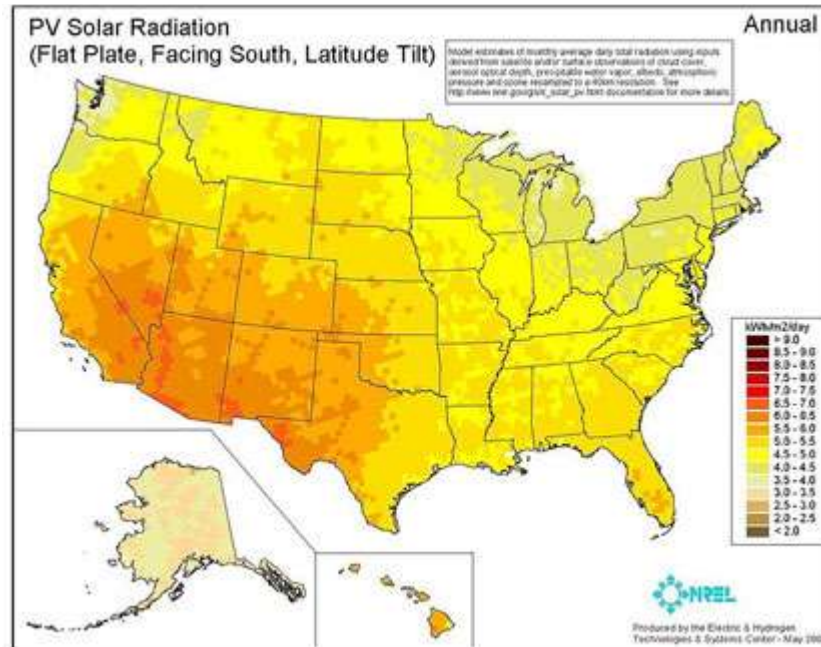


“Solar” is, of course, one of our 21st century buzz words, and in its deepest meaning refers to the ultimate source of nearly all the “energy” available on Planet Earth. All plant and animal life on our big blue planet depend on energy from the sun — with the plants converting sunlight into various stored forms of vegetable sugars, oils and other compounds, and animals then eating those plants and extracting the stored vegetable energy to heat and power their bodies.

In the modern sense of the word, however, “solar” usually refers to the conversion of the sun’s energy for one

of three very human uses: space heating, water heating, and electricity. The “space heating” aspect of human solar energy utilization is relatively ancient, probably dating back to the first adobe houses in Africa and Asia. Simply by constructing a shelter of thick earthen walls, mankind was able to absorb solar heat during the daylight hours and see that heat slowly released during the cooler night hours.

Modern developments in solar technology have expanded the possibilities of solar energy. The most romantic new use is the photo-voltaic (PV) cell — a collection of crystalline silicon wafers that can convert sunlight directly into electricity. Due to the growing demand for clean sources of energy, the manufacture of solar cells and PV arrays has expanded dramatically in recent years. *Continued...*



Map shows the potential for PV-generated electricity throughout the U.S. Archuleta County appears to have a slightly higher potential than the rest of Colorado. Map courtesy en.wikipedia.org

But in fact, the conversion of sunlight into electricity using PV technology is fairly inefficient. It requires nearly a quarter of the total energy produced by a PV array during its useful life just to manufacture the array itself.

By comparison, using the sun’s warmth to heat water inside an efficient solar water heater — a fairly low-tech, enclosed box with water pipes inside — is about 20 times more efficient than current PV technology.

One of the most attractive aspects of solar power — especially non-PV solar power — is its cleanliness. Unlike the burning of fossil fuels or other fuels, solar energy causes no pollution or “greenhouse gases”. As scientists around the world have become convinced that mankind’s extensive use of burned fuels could culminate in potentially disastrous climate changes worldwide, solar energy is becoming more and more attractive.

In their claim to be a viable “solar energy” project, the Geothermal Greenhouse Project is referring mainly to the fact that a greenhouse — by definition — uses glass or clear plastic panels to allow in, and trap, solar energy. So the word “greenhouse” applied to any project necessarily implies the word “solar.”

The solar energy available in Pagosa Springs varies with the season. Most “English style” greenhouses do not collect enough solar energy during the winter months to keep the crops inside from freezing. The especially efficient geodesic greenhouse kits built by our local Pagosa company, Growing Spaces, have proven themselves

capable of supporting certain cold-weather crops like lettuces and other greens all through the winter months, with the addition of a fairly small heating unit to get the greenhouse through the freezing cold nights.

[Click here to learn more about Growing Spaces.](#)

Another “clean” energy source that waltzed into the American limelight following the Arab oil embargo of the 1970s is geothermal energy. Like the sun but on a much more modest level, the earth itself is a heat source. From what scientists can tell, the depths of the earth’s core consists of extremely hot, molten rock, and that heat generally makes its way to the earth’s surface in a fairly mild-mannered way — except in rare cases such as volcanic eruptions. The mild action of the earth’s rising natural heat energy is evident in the fact that a water pipe buried four feet below the ground is safe from the frigid temperatures of a Pagosa Springs winter; the warmth of the earth at a depth of 48 inches keeps the water line from freezing.

Another way the earth’s heat makes its way to the surface, in certain locations, is via geothermally heated water. Pagosa Springs happens to be one of the locations where a human community has tapped into a geothermal aquifer and adapted its 145 degree, mineral-rich water to two basic uses: therapeutic bathing pools and the heating of municipal buildings, private businesses, and sidewalks.

Very few locations in Colorado — or anywhere in the world — have adapted a geothermal water source for heating municipal buildings.

That makes Pagosa Springs rather unique in that regard, though I’ve seen very little evidence that our unique “alternative energy” municipal heating system attracts a significant number of tourists. Statements by mayor Aragon and by the GGP seems to suggest, however, that the same tourists who show so little interest in one of the country’s most innovate and “alternative” municipal heating systems will somehow be enthralled by the same technology applied to a few dome-shaped greenhouses.

If you look at the five keywords currently being use to promote our mysterious greenhouse project — “Solar, Community, Greenhouse, Permaculture, Geothermal” — you may notice the absence of the words “Tourism” or “Jobs.”

The idea that tourists will travel all the way to Pagosa to see our geothermal greenhouses has, nevertheless, been a regular theme in speeches by the mayor and his partnership, as has been the idea of economic vitality or jobs creation. We might want to look at those claims in a later article.

But first, let’s focus on the second keyword: “Community.” Like the word “solar,” the buzzword “community” can mean different things to different people. Considering that there has been relatively little community involvement in the Geothermal Greenhouse Partnership so far, I wanted to see what the keyword “Community” meant to the two volunteers serving on the steering committee — the two people I assumed would be most concerned with community: Tamra Allen and Kathy Keyes

The Mysterious Greenhouse Project, Part Five

Bill Hudson | 4/22/09

I had been looking forward to interviewing Tamra Allen about the Geothermal Greenhouse Partnership (GGP), for a couple of reasons.

First, I knew I would be writing about the mysterious geothermal greenhouse project in a few days, when the “ribbon cutting ceremony” took place in Centennial Park — and I’d been told that Allen had been appointed “project manager.” I wasn’t sure if that meant Allen had already passed beyond the realm of “volunteer” into

the “paid staff” world occupied by her fellow GGP task force members Sheila Berger, Rick Bellis and Michael Whiting — Berger’s pay having been donated by Pagosa Area Water and Sanitation (PAWSD). Bellis’ by Archuleta County, and Whiting’s by Southwest Land Alliance — or whether Allen’s position as “project manager” had remained an unpaid, volunteer position.

Second, I had always admired Allen’s dignity and honesty, while she had served the Town of Pagosa Springs as planner director — and for a short time, as interim Town manager. Upholding one’s dignity and honesty was not always an easy task when dealing with public boards in Pagosa Springs, but Allen had always seemed composed and clear — and straightforward without being abrasive. *Continued...*



Pagosa mayor Ross Aragon turns a spade of soil at Centennial Park last Thursday, at the official groundbreaking of the mysterious geothermal greenhouse project. Looking on, from left: Southwest Land Alliance's Michael Whiting, and Archuleta County Commissioners Bob Moomaw and Clifford Lucero. Photo by Glenn Walsh.

Actually, I had a third reason for feeling eager about meeting with Allen. I had been spending a good deal of time with my friend Glenn Walsh, since my marriage had taken a turn recently, and Glenn’s wife Margaret had lately expressed concern about the geothermal greenhouse project.

Margaret and a small group of downtown gardeners, who cooperatively operate a modest Community Garden project in Centennial Park — with the blessing of the Town of Pagosa Springs — were about to begin planting their 2009 crops in several small plots at the west end of the park. The group had heard — through the grapevine — that the GGP had decided to build their new greenhouses directly over the site of the Community Garden.

The most upsetting part of this potentially awkward situation, for Margaret and Glenn, was that the GGP — which claimed to have as one of their main goals, the building of “Community” — had never sat down with Margaret and her group and discussed their plans.

So, I was curious to discover what the term “Community” meant to the GGP — when they were holding an upcoming groundbreaking ceremony in a few days, to celebrate a new greenhouse project that would, apparently, displace a group of the town’s most avid and knowledgeable gardeners — and never have scheduled a meeting with those gardeners?

Additionally, I was curious why the GGP had never, to my knowledge, held a public hearing about their Town-

and County- and PAWSD-supported project — if they were indeed interested in building “Community”. Doesn’t “Community” necessarily imply “Community Participation?”

So far, that participation seemed to be sorely lacking.

Allen and I met at the Riverpoint Coffee Café, a stone’s throw away from Centennial Park — the site of the proposed greenhouse project, and of the existing Community Garden. I’d had many conversations with Allen over the four years I’ve been writing for the *Daily Post*, and most have been quite amiable — but occasionally Allen and I have been on the opposite sides of certain political fences, and I willingly admit I am probably not always the most pleasant face to look at, over a political fence.

Perhaps Allen knew I had some serious questions about the GGP, because she was appropriately composed and reserved as I joined her at her table.

“Tell me about the Partnership,” I began. “Obviously, the Town is involved — mayor Ross Aragon sits on the GGP board — and we have the County, and Southwest Land Alliance. Who else is involved?”

“I think, more importantly, it’s Community,” Allen said. “We are trying to bring in as many local ... whether it be agencies, in the sense of PAWSD, Town, the County ... as well as local businesses. Hart Construction will be contributing in-kind; Scott Farnham and his Civil Design Team will be doing some in-kind work; Growing Spaces — Puja and Udgar Parsons — will be identified partners. We’re definitely trying to outreach, and pool the community’s resources and expertise, to make the project come out of the ground.”

“The Southwest Land Alliance website says ‘Opening Fall 2009,’” I continued questioning. “Tell me about that.”

Allen smiled. “We’re incredibly optimistic. I’ll leave it at that. Yes, we’re incredibly optimistic. We are at this time pulling together a business plan for the programming for the greenhouses, we’re trying to get the engineering done. So all of that is forthcoming. We’re looking at September of this year to have a structure in the ground and operating.”

Was it true, as I had heard, that the greenhouses would displace the existing Community Garden?

“That is true,” Allen answered. “That’s the area the Town has dedicated to the GGP. Our hope ... obviously, we haven’t done a lot of direct interfacing, as you probably heard through Margaret. But the hope is that we can integrate some of the Community Garden space into the actual site plan. We’re looking at possibly some ‘edible landscaping’ outside the greenhouses, so maybe it’s not linear beds like what they are used to, but there may be opportunities there.”

“I can’t show you today a tentative site plan. Hopefully on Thursday [at the groundbreaking] we will be able to show you one.” (That plan was, unfortunately, not available at the Thursday groundbreaking.)

Is there a floodplain issue in the part of Centennial Park where the structures are being planned, on top of the Community Garden site? I understood that permanent structures are not allowed in areas prone to flooding, and I believe I’ve seen the San Juan River seep up the banks into Centennial Park during high-water events.

“There may be a floodplain issue. The survey is still forthcoming. Civil Design Team is working on that for us.”

The publicity about the GGP project, as I’ve noted in the earlier articles in this series, have implied that the

geothermal greenhouses are trying to be “all things to all people.” The project has been alternately described as a place for school children to learn about horticulture, as a demonstration project about running an agricultural business in Pagosa Springs, as a demonstration project about using alternative energy sources, as a source of affordable produce for area restaurants, as a tourist attraction.

And let’s not forget, it has to be about “Community.”

“It’s going to be a little bit of everything,” Allen confirmed. “It’s a demonstration project. It’s a demonstration of the Town’s geothermal resources, it’s a demonstration of what a larger scale commercial project might entail in the area. It’s going to serve as an education tool. And it’s going to serve as one source of local food. Hopefully it will inspire other sources of local food.

”All of these are yet to be fleshed out in the business plan.”

Okay, I understand first-hand the tendency of Pagosa businesses to try and be “all things to all people.” My own business, PagosaDailyPost.com. operates a news website, but also does web design, web hosting, video production, and graphic design. This week a client asked be if I made signs as well. Last week, I submitted a proposal to paint the new community mural on Main Street.

I want to accommodate everyone — in the hopes of generating enough total income to pay the mortgage. As a result, my business sometimes ends up doing a lot of things in a moderately acceptable fashion — rather than doing one thing very well.

How well was the GGP doing in approaching one of their main goals, the building of “Community” in Pagosa Springs? How was that part going — within this ambitious attempt to accomplish a dozen goals, all at once?.

The Mysterious Greenhouse Project, Part Six

Bill Hudson | 4/23/09

Geothermal Greenhouse Partnership (GGP) project manager Tamra Allen and I were sitting at Riverpoint Coffee Café, discussing a range of topics related to mayor Ross Aragon’s pet project — a complex of multi-use greenhouses proposed for Centennial Park, to be heated by the Town’s geothermal water and serving multiple — and perhaps conflicting — community purposes.

I asked Allen whether the GGP had been meeting regularly with Town Parks director Jim Miller — a person with something of a personal investment in the downtown parks, since he had been responsible for much of the landscaping and planning for the parks. Miller had also been instrumental in getting the existing Community Garden started two years ago — a gardening project which will apparently be displaced by the mayor’s proposed greenhouse complex.

Allen answered, “We have done some very cursory interfacing with Jim; a lot of our communication has been through David Mitchem, the Town manager, who has been attending our meetings for four or five months now ... Obviously, the Town has committed park space within Centennial Park for the project.

“Long term, we want the project to be self-sufficient and not rely on Town staff to maintain the grounds or otherwise be involved in the project.

”Not that their involvement would be a bad thing, it’s just that we want the project to be self-sustaining.”

I suggested to Allen that, in fact, some people in the community — like Parks director Jim Miller — have been very active in the landscaping and gardening of our downtown community for many years, and might actually *want* to be involved in the planning of GGP’s proposed greenhouse project, if they were invited.

Which brought us to the question: Why has the community not been invited, so far, to participate in this project? It seemed that one of the stated purposes of the GGP is to enhance that vaguely defined asset we call “Community.”

Now the GGP is developing their business plan. Didn’t they want any community input before they complete their business plan? I asked Allen.

“That’s a good question, and I don’t think there’s a right or wrong answer. Or maybe, there is a wrong — and very right — answer to that. At this point in time, we are not looking for ‘pure’ public input. We’re looking for serious partners [in the form of various local agencies], as I already mentioned.

“But once we have the foundation of a business plan, we will try to outreach to subcommittees for additional work. And there will be a definite request made at our groundbreaking ceremony on Thursday — to request, if people are interested in participating, to please sign up for our mailing list. From there we will be able to tap into local expertise ... for help with the educational component, the greenhouse operations, and funding and fundraising. We’ll definitely look at tapping in.

“Right now, the GGP committee is trying to get the foundational elements out of the way, before we want to bring in a more diverse group of people to work on specific components.

“Because, everybody has a very different idea about how this project will take place. At this point, we’ve identified a wide variety of different ways the GGP can go, but we’re trying to boil it down to the core elements. What is this facility and how does it inter-relate with the community’s values — and its need for education, outreach and economic development?

“So, in a nutshell, we’ve heard quite a lot from the community, via emails and phone calls. Overall, what we’ve heard is that people are really excited about the opportunity this community has to tap into its geothermal resource and grow its own food.”

I’m the first to admit that I know very little about community involvement, and community organizing. Over the past four years, working as a *Daily Post* reporter, I have seen many seriously failed attempts to get the community involved in government planning and operations — and a few modestly successful ones.

Mostly, I have seen ‘lip service’ given to public involvement — government leaders who allow public testimony, but who then turn around and, five minutes later, make decisions in direct opposition to what they have just heard.

There are no doubt many reasons why a government and community leader would fail to ask for, or shut his ears to, public input. In many cases, the leader has already chosen the goal and set the timeline — and he knows that public input is merely going to be an unnecessary distraction. Or he may feel that the public really doesn’t know anything about the subject at hand. Or he may feel that the project will be delayed — or even derailed — by allowing public involvement.

Allen hadn’t make clear which of those reasons had been behind the GGP’s decision to limit public involvement in the actions of a publicly supported partnership which will utilize a public energy resource within a public park space.

Had the decision to exclude the public been made by mayor Ross Aragon even before he chose the five members of the GGP board? Did this project require such a highly controlled decision-making process that public input would have been detrimental?

The question I had for Allen, however, was: Can a project that is fearful of, or neglectful of, public input can ever hope to build “Community.”

“We’re all volunteers on the GGP board, and we have a certain capacity for public input — without someone who is being paid to do outreach and public coordination and administration. So we feel — and I hope I’m speaking for the rest of the board — that at this time we don’t have the capacity to bring on innumerable volunteers — without first having some of the foundational elements laid.”

It appears, from the statements I have heard over the past few weeks, that three of the GGP board members are in fact being paid for their involvement. Statements have been made about both Archuleta County and PAWSD “donating staff time to the project.” That would mean, I assume, that GGP board members Rick Bellis — County director of Community Development — and Sheila Berger — PAWSD special projects director — are not exactly “volunteers” in the strictest sense of the word. And board member Michael Whiting is the paid executive director of the Southwest Land Alliance, the group serving as the fiscal agent for the GGP.

So Allen’s statements about everyone on the board being volunteers is, perhaps, somewhat misleading.

But Allen’s comments did clarify the group’s reluctance to involve the community: they did have enough paid staff to accommodate public involvement at this point in the planning process.

I found that idea somewhat depressing, to be honest. And I didn’t want to write yet another depressing *Daily Post* article about another Ross Aragon project. So I called up Pagosa Baking Company owner Kathy Keyes and asked for an interview. Keyes — who serves with Allen, Bellis, Berger, Whiting and Aragon on the GGP board — is one of the most upbeat, forward-looking business people I know in Pagosa Springs.

Maybe she would have a perspective to offer, that could turn my article in a different direction?

The Mysterious Greenhouse Project, Part Seven

Bill Hudson | 4/24/09

When I sat down with Pagosa Baking Company owner Kathy Keyes to discuss the proposed geothermal greenhouse project being pushed by mayor Ross Aragon and his Geothermal Greenhouse Partnership (GGP), I had two big concerns.

First, I was concerned because Keyes has been one of the most loyal advertisers on the *Pagosa Daily Post*. Our online news website is almost totally dependent upon the Pagosa business community to fund our operations, and I have — on rare occasions — published news and opinions that caused certain business people to stop advertising with the *Daily Post*.

Keyes was one of the key organizers chosen by Aragon to serve on the GGP — and I knew my article series was going to raise questions about that project. I definitely didn’t want my articles to come between Keyes and her interest in helping support the *Post*.

My second big concern was the manner in which the GGP was pursuing the mayor’s proposed project.

It seemed to me, as a partially-informed outside observer, that the GGP was charging ahead on a project that had — so far — not gathered significant public support. The project was proposing to use public energy resources and public land — and now, according to Congressman John Salazar’s website, even public funds — to support a still very vague concept — but the Partnership had not, to my knowledge, ever invited the public to give its input, or ideas, or even to state whether they want such a thing.

The project seemed to me, so far, very much a “top-down” effort, with the mayor forcing his vision upon the community — rather than a “bottom-up” grassroots request coming from, and supported by, the residents of Pagosa Springs. Only one member of the GGP board was a town resident — and I was concerned that, in the long run, town residents would end up subsidizing the mayor’s greenhouse, the same way they have ended up subsidizing the Community Center to the tune of maybe \$200,000 a year.

The Community Center was another of Ross Aragon’s ideas, promoted to the community by a “public partnership” very similar to the current Geothermal Greenhouse Partnership and supposed to be “self-supporting” when it was completed. The “partnership” never did raise the donations it was supposed to raise for the construction costs, the project was scaled back significantly, and the Town of Pagosa Springs has ended up subsidizing the Center, which has consistently failed to generate enough income to support itself — or make its mortgage payments.

Maybe you can tell, by these concerns, that I am a town resident. Of the five people who sit on the GGP board with Ross Aragon, I think only Tamra Allen was living here when the Community Center project was pushed through, so they may not be aware of these kinds of concerns. But it must be obvious to them, nevertheless, that — so far — the town residents and business community have not become involved in this new innovate, but risky, endeavor dreamed up by mayor Aragon — and they are not yet involved partly because, as Tamra Allen told me in [yesterday’s interview](#), they have not yet been invited to participate.

Yet the project has already “broken ground” in a ceremony held last week in Centennial Park.

So with all these concerns — and with little background knowledge about what the GGP was doing — I sat down with a cup of fresh coffee and had a chat with Kathy Keyes.

Keyes has been involved with the Town of Pagosa Springs before, when she served on the Big Box task force, a group that spent a year developing a new policy for the Town to limit large scale retail development here — and then saw the Town Council essentially reject their year’s worth of work.

Nevertheless, Keyes has a oft-expressed desire to see Pagosa Springs develop a deeper sense of “community” and to increase its “sustainability” with expanded local agriculture. She has supported the Farmer’s Market and various food-related cottage industries through her Pagosa Baking Company business.

Like all the members of the GGP, she’s energetic and intelligent — and she has an easy and infectious laugh, to boot.

I started the interview by telling Keyes about my previous interview with Allen, and my sense that the project was still in a very preliminary stage; there was no business plan yet, no completed survey of the site, no clear plan for how the geothermal water would be used — the GGP doesn’t even know yet if the site is in the floodplain of the San Juan River.

Keyes confirmed that perception.

“Right now, the project is running on in-kind donations. Civil Design Team is working on the site plan — and we were hoping we would have a site plan and some engineering in time for the groundbreaking ceremony tomorrow, but when you are depending on donations, you have to be patient.

“We are envisioning three [Growing Spaces geodesic] domes — two 52-foot diameter and one 33-foot diameter. Right now, we are thinking one of the 51-foot domes will be a community space, the smaller one would be dedicated to educational uses. We’ve had some commercial growers come in to talk to us; we’ve had local people come in who have greenhouse-oriented businesses — and we’re learning a lot.

“We thought we had specifics when we first started, but as we’re getting more and more information, we’re realizing that we need to learn more before we make those decisions.”

Keyes rattled off the names of several commercial agriculture experts who had done presentations for the GGP.

“We’re looking at Phase One and Phase Two, where Phase One is the community-oriented part, and Phase Two is commercial-oriented. And what we’re hearing is that the English-style greenhouses are better [than the Growing Domes] in terms of commercial production — the shape is better in terms of production.”

Daily Post writer Glenn Walsh happened to be sitting in on the interview that morning, and he asked Keyes how frankly commercial the project wanted to be — considering the attempts by the Town of Pagosa Springs to preserve a somewhat historic look in the Downtown Historic District just across the street from the proposed greenhouse location. Would the GGP consider, possibly, a more elegant design that might attract tourists? What would the effect of modern dome-shaped or commercial greenhouses have on our downtown architectural aesthetics?

Would the same kind of commercial greenhouse setup that might look good somewhere down Highway 84, be the best choice for downtown in Centennial Park?

Keyes replied, “We want to do a demonstration project, and show that geothermal is a viable option for — you know, it’s difficult to make a profit with a greenhouse operation. These are pieces we’re still learning from different people, that part of the cost in commercial operations is heating. In commercial operations, the heating and the labor are the highest costs. If we can use geothermal heat, that could be attractive to a commercial grower.

“Speaking for myself, food is near and dear to my heart.” Keyes laughed. “I think showcasing a green-oriented community could attract other businesses — and that could help even out our economy. You guys are here at the bakery all the time, you know what it looks like in the summer and what it looks like off season. All the small businesses here struggle to deal with the spikes we encounter and not have an even year — and I think if we are able to attract more businesses looking for an association with a green community, that could help even out our economy.

“I’m a baker, and I love being a baker, but I’m also an employer. I want to see my employees able to keep roofs over their heads, and I want to pay a good wage. And that’s exceedingly difficult in Pagosa Springs.”

Can the mayor’s innovative geothermal greenhouse proposal really help solve these types of employment problems in our little mountain town?

The Mysterious Greenhouse Project, Part Eight

Bill Hudson | 4/27/09

The economy. That's the thing foremost on almost everyone's mind lately. Certainly, it's on the mind of mayor Ross Aragon and the Town Council, who have been making one difficult decision after another lately — how to deal with their own impact fees, how to fund an expensive sewer treatment plant, how to cut the Town budget without losing valuable employees, whether to cooperate more closely with the Archuleta County government in hopes of cutting costs.

And in the face of all this cost cutting, the mayor wants to fund a geothermal greenhouse in hopes of stimulating, in some way, the local economy.

What is the likelihood that the geothermal greenhouse will accomplish such an ambitious goal?

Or conversely, what is the likelihood that the geothermal greenhouse project will become yet another a tax drain on the community?

At the sparsely attended groundbreaking ceremony two weeks ago, the mayor introduced the five-person team he appointed to direct his greenhouse project. That team consists of Southwest Land Alliance director Michael Whiting, PAWSD special projects director Sheila Berger, Pagosa Baking Company owner Kathy Keyes, Archuleta County planner Rick Bellis, and former Town planner Tamra Allen.

“And without this group here, all the involvement in the world would not help. This is the group that's going to lead it. This is the group that will remain optimistic, no matter what.”

Aragon had every right to extol the qualities of his Geothermal Greenhouse Partnership (GGP) board, as they are, indeed, five of the “smartest and hardest-working people” in the community. Depending upon the outcome the mayor is hoping for, these might be the five best people he could possibly choose.

Sheila Berger is, by all accounts, one of the best grant writers in the county, and a talented researcher. If the mayor wants his geothermal greenhouse operations to be funded by government grants, Berger was an excellent choice.

But we might also want to consider that Berger has most recently been involved in spearheading the recent PAWSD decisions that increased impact fees on new construction — and saw the proposed Dry Gulch reservoir project more than double in cost while decreasing to half the size. Huge fees for that proposed new reservoir is already being charged, even though the community voted against funding the project in 2004.

Michael Whiting directs the Southwest Land Alliance, a non-profit land conservation organization that has, so far, successfully helped preserve several large tracts of scenic ranch land from development. That was no simple feat during a time of rapidly increasing land values such as Archuleta County saw from 1995 through 2005. (Now that the local real estate market has tanked, we will see if Whiting's work becomes easier, or harder.) But the Southwest Land Alliance, as successful as it may be at serving the community, is not a profit-making business, but rather depends to a large degree upon grant funding and donations.

GGP project manager Tamra Allen did some excellent work as Town planner, doing her best to preserve property values in Pagosa Springs over the past several years in the face of powerful development pressures — while trying to also preserve the community's “small-town character.” But to my knowledge, Allen has never run a profit-making business.

Before his recent move to Pagosa Springs recently, County planner Rick Bellis had built up an extensive resumé in administrative community planning and code enforcement in Plumsted, New Jersey — as well as coordinating the Plumsted Municipal Drug and Alcohol Alliance for a period of time — but again, it appears

that Bellis has never spent a great deal of time running a profit-making business.

The only person on mayor Aragon's Geothermal Greenhouse Partnership board who currently runs a successful business is Pagosa Baking Company owner Kathy Keyes — who additionally has been actively involved in other community-building activities such as the Pagosa Springs Farmers Market, now planning for its third season.

Mayor Ross Aragon, besides serving as Pagosa's volunteer mayor for nearly 30 years, runs the non-profit Archuleta Housing Corporation — which, with the help of government subsidies, provides low-income housing at several locations in downtown Pagosa Springs.

So back to our original question. Considering that Aragon's GGP board is made up almost exclusively of folks whose careers here have been funded by government taxes, fees, subsidies and donations — the only exception being Kathy Keyes — what is the likelihood that the Geothermal Greenhouse Partnership will also be funded, ultimately, out of the taxpayers' pockets?

Is there even a ghost of a chance that the GGP project will be self-supporting, never mind contributing to positive economic growth of the community?

The project does have a few positive things going for it, in terms of ultimately turning a profit and providing jobs and direct economic benefit. The Town of Pagosa Springs is donating the land. The Town and County have both agreed to donate geothermal water for heating, as needed. It's likely that some government grants can be found to fund some of the capital costs.

Those advantages will certainly work toward an economically-positive project. If the GGP makes a final decision to focus on a profitable, economically significant greenhouse operation — an operation that does not drain funds, via taxes, from an already struggling local economy, but rather adds economic value to the community — it's possible the mayor's geothermal greenhouse could be a benefit.

Reading the promotional materials coming from the GGP and talking with Allen and Keyes, it appears that the GGP has not yet made such a decision. Some of the other benefits the group is suggesting — generating community involvement, providing educational services, developing prototype alternative energy systems, providing organic foods to the community at affordable prices — clearly are not aimed at turning a profit, though they might provide government-funded jobs.

Mayor Aragon has made a conscious effort to try and disconnect the GGP project from the Town of Pagosa Springs government — other than the donations of land and community-owned energy resources. The GGP board, however, represents three government agencies — the Town (Aragon and Allen), the County (Bellis), and PAWSD (Berger) plus a community-supported non-profit (Whiting) — and only one private business (Keyes).

At the groundbreaking ceremony on April 16, I looked at the project supporters who comprised the audience, and I did not recognize a single downtown business owner in attendance.

If the GGP really wants to provide all the community benefits they are proposing — and at the same time keep the project from becoming another of mayor Aragon's tax-supported public services, they appear to have their work cut out for them.