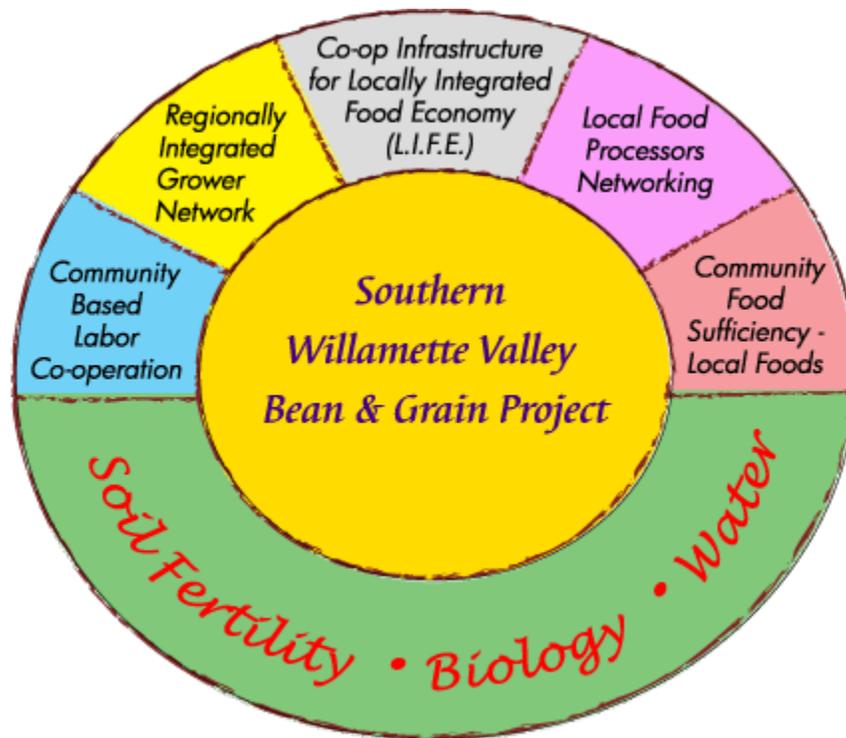


# Southern Willamette Valley Bean, Grain & Edible Seed Project

## Background & Progress Report April 2008



# Part I

## Sunbow Farm April 4, 2008

### “One purpose, many points of view.”

#### Setting:

On April 4th, 2008, twenty-two interested members of the South Willamette Valley gathered at Sunbow Farm for an historic meeting to establish a path toward community food security in the region. What was being considered was no less than a complete transformation of agriculture and the related food system in the bio-region roughly defined by Lane, Lincoln, Linn, and Benton counties which includes an estimated 700,000 acres of farmland, half of which is used for cropland.

This meeting was attended by a number of South Willamette Valley farmers, that included Harry MacCormack (a co-founder of Oregon Tilth), Willow Coberly, Harry Stafford, Shepard Smith, Paul Atkinson and Kirk Richardson. Attendees also included John Caputo and Andy Bennett from Oregon Tilth, Tim Laue from the Eugene Sustainability Commission, Chris Peterson, Terry Rossiter, Lyn Martin, and Dan Sundseth from the Ten Rivers Food Web, Peter Kelly and Mary Anne Jesper from Corvallis, Linda Kelley, Jude Hobbs, David Richey, and Deb Johnson-Shelton from the Lane County Farmland Preservation Society, with Krishna Singh Khalsa from the Lane County Food Policy Council, as meeting facilitator, plus Dan Armstrong from the Lane County Food Policy Council and Rebecka Weinstein from the Ten Rivers Food Web as recorders.

Working under the title of The Southern Willamette Valley Bean and Grain Project, the group met for five hours of discussion and idea sharing. The central focus of the meeting was to address and facilitate the need to transform agricultural practices in the Willamette Valley away from grass seed production, which is currently planted on approximately sixty percent of the cropland, into substantial food production, principally grains and beans. This transition would include a step by step progression from current chemical-based farming toward techniques that promote fertility and soil biology without resorting to heavy applications of petrochemicals.

Of specific interest to the gathering were the following questions: What is the situation of valley farmers and what are their needs in transitioning to organic beans and grain? What problems will the farmers face during this transition? What must the project organizers do to support the farmers during this transition? How can GIS mapping be used to facilitate the transition and best plan future cropland use? What are the next steps needed to accomplish the project's goals?



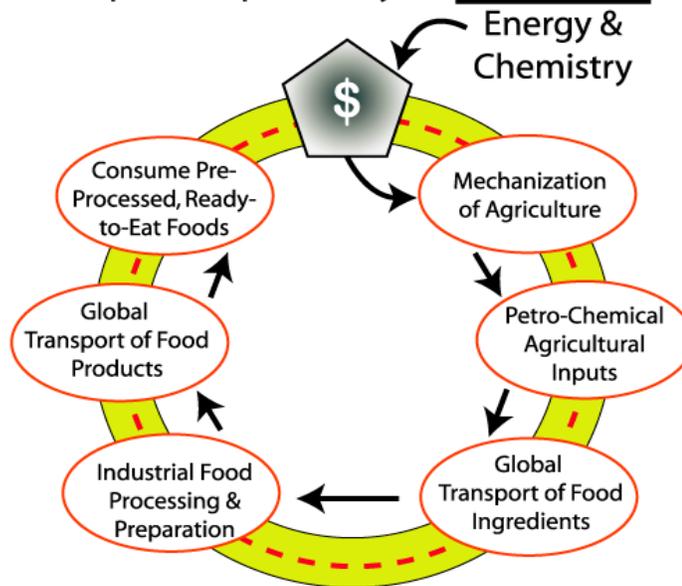
Behind all that was said and done at this meeting was the understanding that for this project to work on the scale that it is envisioned, the early adopters (for example, Willow Coberly and Harry Stalford) must have optimal support them to enable their success.

To underline the significance of this meeting and the Bean and Grain Project in general, what is being proposed is the potential conversion of some significant portion of 250,000 acres of South Willamette Valley cropland from grass seed to organic beans and grains.

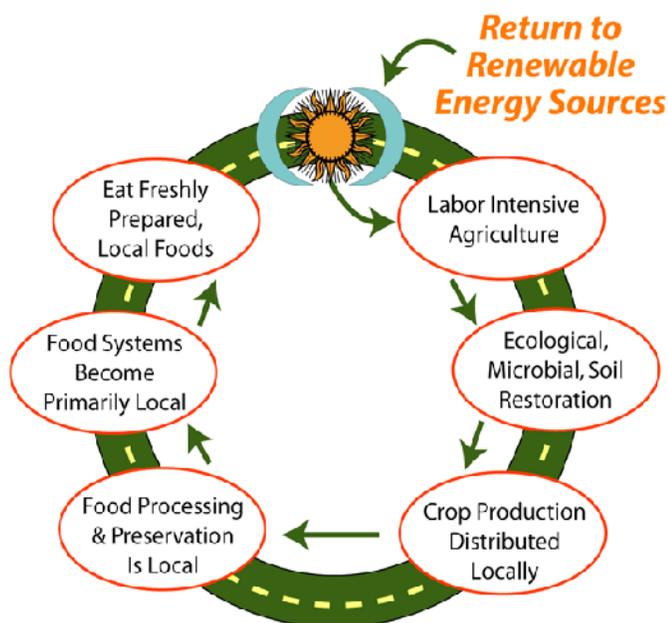
**Situation and Needs:**  
 (Summary of opening statement by Harry MacCormack)

The transformation of agriculture in the South Willamette Valley is a huge process and involves not just the farmers but the entire food system infrastructure. More than just a conversion of grass seed farms to grain and bean farms, the purpose for this transition is aimed at increasing local economic stability in the face of changing geopolitical circumstances, not the least of which are the incursion of peak oil and rapidly inflating petrochemical product prices, the unknown potentials of a changing climate, and the recent volatility of the grain market. Corn, rice, wheat, and soybean prices have been at record

**Current Food System:**  
 Complete Dependency on Fossil Fueled

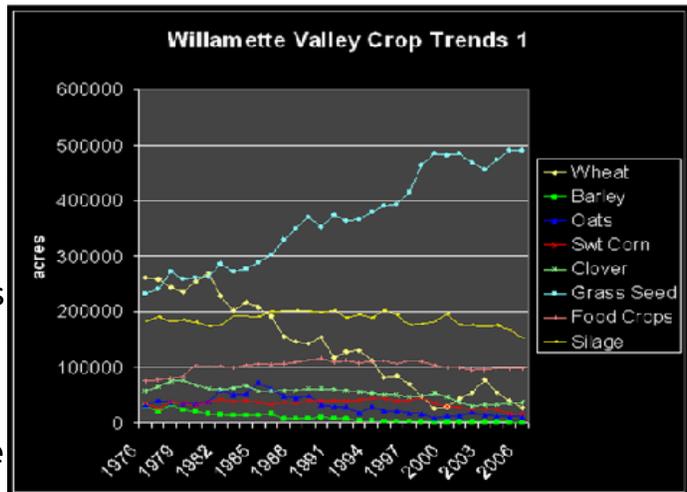


**Collapse of Fossil Fuel Supplies:**  
 Results in Collapse of Current Global Energy System

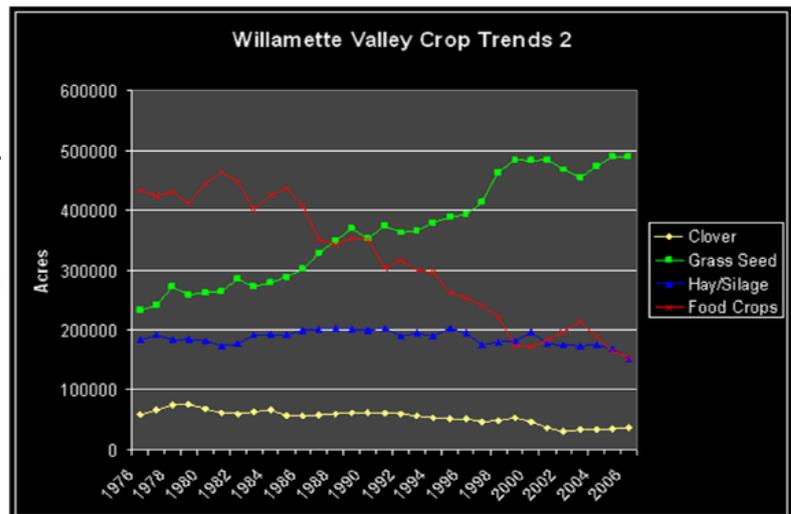


high this winter. The world food situation is changing and the regionalization (relocalization) of farming strategies and food systems is of the highest priority.

After what has been an accelerating twenty-five year run at the grass seed market, the South Willamette Valley is essentially one generation deep in grass seed farmers, many of who are sixty years old or older. Knowledge for growing beans and grains in the valley has been lost to changing agricultural philosophies and must be recovered. There is real need to both inventory regional agricultural knowledge and to experiment with creative growing techniques. Appropriate crop rotations, conservation tillage techniques, use of organic inputs, non-chemical or limited-chemical weed and pest control, all of these concerns will be different for bean and grain production than they would be for grass seed. At the ground level, the technical aspects of tending the land for transition is critical and to some extent ground-breaking.



In conjunction with changing what is grown, there are several other necessary and complimentary considerations for filling out what will essentially be an entirely rebuilt food system. After twenty-five years of catering to global markets and a steady turning away from food crops, ninety-five percent of what the South Willamette Valley eats comes from outside the region.



Because of this, critical food system infrastructure is lacking. Food processors, grain millers, distribution hubs, storage facilities, and farmers markets currently exist at levels capable of handling only five percent of south valley food consumption. The goal is to enable a regional food system that can handle as much or more than thirty percent of the Willamette Valley food needs.

The task ahead is both momentous and daunting. It is also, by the reckoning of the best informed, necessary.



harkens back to the need for education and experiment.

**Pest control is difficult without pesticides.** The same situation regarding weeds is repeated regarding pests. Slugs and voles are a major problem. Efforts to use no-till techniques with grass seed and wheat production has been an uphill battle. Slugs in particular are extremely difficult to control with no-till methods.

**Cover crops are a work in progress.** Experiments with cover crops as a way to diminish soil moisture loss and protect the soil from erosion have created an array of secondary problems. Again education and experimentation with cover crops is a high priority.

**Growing organic wheat will test the farmers' limits.** Harry's unadulterated opinion was "growing organic wheat in the Willamette Valley is impossible—with chemical inputs it will merely be difficult."

**Devalued dollar alters market gradient.** The devaluation of the dollar has had a positive effect on the grass seed market. (This, however, may be minimized if grain prices remain high.)

After Harry Stalford voiced his concerns, the meeting opened to wider discussion on the same subject: What obstacles must be overcome for the success of the transformation?

**Wheat offers soil moisture problems.** Because of high moisture content in certain portions of the Willamette Valley it may be necessary to use tilled fields. In other portions of the valley, wheat may need partial irrigation.

**Processors are needed.** One of the clearest effects of the domination of grass seed farming in the Willamette Valley has been the loss of food system infrastructure. In the case of growing beans, it will be necessary to create locations for bean cleaning and bagging.

**Storage is needed.** For the same reasons that there is a lacking of food processors in the valley, there is also a radical dearth of grain and/or bean storage. If we move to more wheat and beans, there must be more storage—public, private, or cooperative.



**Local markets need stimulation to generate buyers for increased local food production.** Just as there are no food processors or grain/bean storage, there are not sufficient markets to justify a food production increase. Markets must grow in conjunction with increased food production. (Currently, there is movement regarding large scale grain and bean buying from Golden Temple, Grain Millers, and GloryBee. Contracts are on the table waiting to be settled. More than just getting more farmers markets, more than prompting local grocery stores and restaurants to buy local produce, it will be necessary to organize neighborhood grain or bean buying cooperatives. Making a local food system requires everyone joining in.)

**There will be considerable difficulty pricing wheat futures contracts.** Wheat has sold in the \$3.00-4.00 range for the last twenty years. The push to grow corn for ethanol, extended drought in Australia, and a growing Asian middle class drove all grain prices to record highs this winter. Setting contract prices in the aftermath of this grain crisis will be difficult. Next year's harvest will be telling. Until then, projection of future wheat prices in particular could range from \$7.00 a bushel to \$15.

**Nutritional density is as important as yield.** Recent research has revealed that wheat grown in the 1950s may have had higher nutritional value than current strains. When it comes to food security, optimizing cropland will also mean using optimal nutritional varieties of beans and grains.

**No-till transition involves time.** The transition from contemporary industrial farming to no-till and/or organic techniques is not a one-year conversion. In the case of using cover crops, crop rotation, minimum tillage, and complementary weed or pest fighting plants as an alternative to pesticides and herbicides, it takes no less than four years to make significant reductions in chemical inputs. Six years is more realistic. This makes the transition all the more difficult. All risk is on the farmer. The only way to go about this is through piece by piece transition. Some conventional plots must be used to support farmers while transition is made.

**Grain diversity is necessary.** The bean and grain project concentrates on black beans and soft wheat, however, the real challenge is to diversity varieties of beans and to diversify varieties of grains. Buckwheat and quinoa are possible additions to Willamette Valley farming.



**Balance on farm is necessary.** Farms

devoted solely to crops or solely to livestock are difficult to manage as real living systems. Small farms, where livestock is balanced with field crops, allow livestock manure to be a valuable field crop input. When there is too much livestock, this same valuable input can become a ground water toxin.

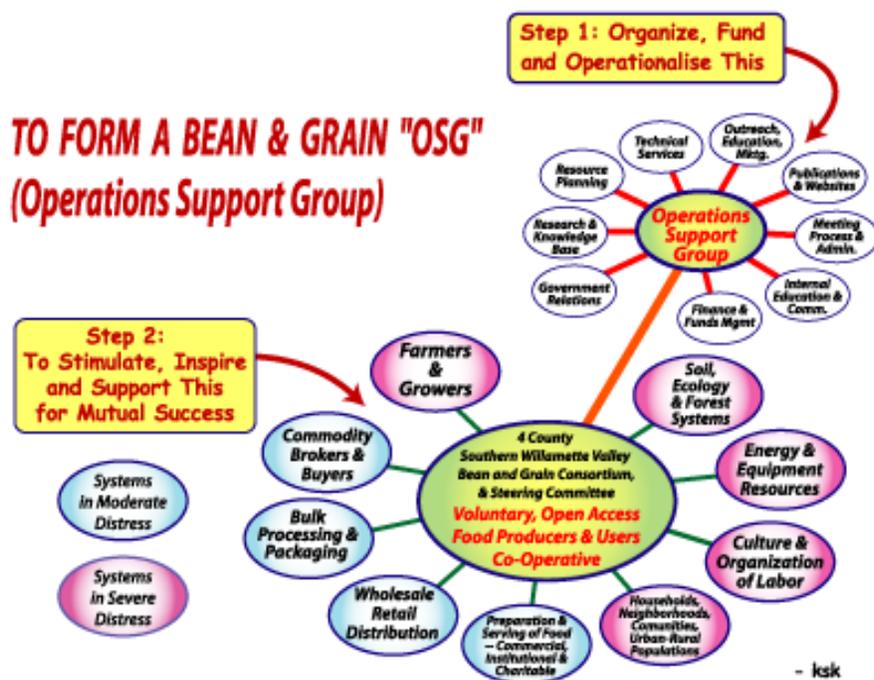
**High prices discourage people from buying locally.** Right now, the buy local push runs against the current of the economy. Why should people buy locally when non-local prices are lower? (There is evidence to believe that the economic gradient is changing. Higher fuel prices will undercut the labor advantages available to foreign/distant growers.) It must be “taught” to local buyers that dollar value is not the only criterion. There is much “non-dollar” community value in supporting local growers. The long-term good sense of building secure local food systems far out weighs the short-term gains of modest price differentials. Consider it a critical cultural shift; we are only just learning the difference between competitive “adversarial” markets and mutual “community” markets.

**Farmer demographics pose a serious problem.** The average age of Willamette Valley farmers pushes sixty. There is no next generation of Oregon farmers. The largest base of future farmers comes from the growing number of Mexican immigrants working as cheap farm labor. We need to find a next generation of Oregon farmers. Farm internships and mentoring are necessary.

**Support:**

As important as the logistics of work at the ground level, it will be necessary in the first phases of the Bean and Grain Project to both provide support for the early adopters and assemble information for the long term evolution of the project. Acquiring grants to fund field advocates and staff people is a priority. Research and experiment in the field will also be an ongoing effort that will need funding. The next five years will be a time of intense learning with a need for high levels of communication between all parties. Money is needed to create the necessary information sharing network and the staff people to operate it.

It will also be imperative to continue and advance the



dialogue with large local buyers—Grain Millers, GloryBee, and Golden Temple. These are the only buyers with enough financial leverage to provide meaningful and multi-year contracts with local growers. At the same time, ground work must proceed at the municipal level to verify the need for food system infrastructure—markets, storage, processors, distributors.

Not to be forgotten is the need to continue the push for buying local. Many organizations already exist that are doing this. It is also becoming a growing national awareness. But the question still remains? Where are the locavores? Increasing local food production can only work if locals buy that food. Stimulus for neighborhood food buying cooperative is necessary.

### **GIS Mapping:**

Informational support is big part of the equation. GIS mapping can be a powerful tool. During the afternoon portion of the meeting, Paul Atkinson gave a presentation on the importance and use of GIS mapping. One of his major points was the need to provide city planners with detailed soil maps. It is critical to inform city planners of the urgent need for farmland protection and, especially, to curtail any further development on areas containing high value soils.

David Richey, who does GIS work for the Lane County Council of Governments, followed Paul with a show-and-tell array of maps that he has made of the Willamette Valley. In an extended and rich technical presentation, David detailed all the various kinds of information that can be gathered from and/or displayed on GIS maps. Soils types, microclimates identification, topography, and crop distribution can be mapped in a way that will increase the efficiency which valued cropland is used. All of this is applicable to the long-range plan to transform Willamette Valley agriculture from primarily grass seed production to substantial food production.

In the end, a secure Willamette Valley food system will need more than grain and beans. A complete and balanced, nutritionally complementary, variety of grains, legumes, vegetables, and fruits can be grown in the valley. GIS mapping can be an effective tool for making this vision a reality.

### **Next Steps:**

After several years and much dedication by Harry MacCormack, The Bean and Grain Project is just stretching its legs. The current growing season will be critical. The work of the farmers and the people that actually put their hands into the soil will be telling. Their next step is obvious—to grow the living proof of the vision.

For the project organizers, their next step is securing funding. Harry MacCormack is working with Oregon Tilth and other grant fund sources, to hire in-field advocates, that is, farmers (five for five years) to talk to farmers about the transition. These in-field

advocates, like all of the above, are a necessary part of the big picture. Without the conversion of farmers and acreage, the project is a seed without soil or water.

The Bean and Grain Project also plans to send a qualified delegation to Portland, Oregon in June to attend the "Sustainable Agriculture Funding Conference." This conference represents another opportunity to find funding.

Summary:

- The ground has been prepared. The seeds are in the ground. The spring rains trade time with rays of sunlight. The Bean and Grain Project is poised to meet the challenges of changing times.
- There are at least two solutions to every problem...and we have both.

## **Appendix I.**

### **Meeting Summary, Facilitator's Report**

## **Lane County Food Policy Council Meeting on COMMUNITY FOOD SECURITY: One Purpose, Many Points of View Monday, January 14, 2008 GloryBee Foods Eugene, Oregon**

Krishna Singh Khalsa, Lane County Food Policy Council

Welcome - Setting the stage—meeting expectations

- Lysbeth Borie, group facilitator, Alpha Institute
  - "System-wide Solutions: Willamette Bean and Grain Coalition Project"  
Harry MacCormack, Ten Rivers Food Web
  - "GloryBee and the Local Food System"  
Richard Turanski, founder and president, GloryBee Foods
  - Denise Griewisch, Executive Director, FOOD for Lane County
  - Robert Serrano, vice president of technical innovation, Grain Millers, Inc.
  - Participants' comments and concerns
  - Lysbeth Borie
- Next steps
- Krishna Singh Khalsa
- Adjourn

## **Welcome: Setting the stage for meeting expectations**

Krishna Singh Khalsa, Lane County Food Policy Council

The group was welcomed to the meeting. This is an opportunity for everyone to learn about what is going on in the local food system, as well as an opportunity for the Lane County Food Policy Council and the Corvallis-area Ten Rivers Food Web to work together.

Because of rising fossil fuel prices, among other things, we will be facing challenges in maintaining a local food system. Because eating is always local, an economical answer is to raise as much food as we can locally.

There will be opportunities for further discussion about the food system and how GloryBee, Grain Millers and other local food businesses are a part of this system. Our goal is to evolve food system connections in order to improve community food security.

## **“System-Wide Solutions: Willamette Bean and Grain Coalition Project”**

**Harry MacCormack, Ten Rivers Food Web**

The intention of the Willamette Bean and Grain Coalition Project is to create a durable food system in the Southern Willamette Valley. Because of rising energy costs, we may need to have our food localized in the near future. Many foods can be grown here. Pioneering relocalization work being done in Willits, California estimates that 50% to 90% of our calorie needs can be filled with grains and beans. Beans and grains are dense with nutrition and have long storage capability with minimal expense. However, we have a critical need much more storage capacity for such staples in the Willamette Valley.

There are about 600,000 people in Lane, Linn, Benton and Lincoln counties. While modern agricultural yields are around 100 bushels per acre, the crop yield before industrial agriculture in this area was about 30 bushels per acre. This may be more predictive of crop yields in the future, because chemical agriculture may not be sustainable. It would require 26,000 to 66,000 acres, planted in grains and beans, to feed the population in these counties. This does not include the need for animal feed, which would require a lot more acreage.

Some factors that feed into the increased need to relocalize our food supply include:

- inclement weather worldwide has led to rising prices
- the conversion of land to grain production for ethanol in the U.S. has led to rising food prices
- feed costs for animals have doubled in the last four months
- rising prices aren't good for food security
- the current food system is completely dependent on fossil fuels.

White wheat, oats and buckwheat all can be grown in the Willamette Valley. Black beans and pintos, as well as other beans, such as favas, garbanzos and soybeans can be grown in the valley. Quinoa, which is high in protein, makes a good rotation crop; this is the highest-protein crop we have. At Harry's test farm they were able to grow lima beans, which usually need a longer season. Yields for beans on Harry's test farm were pretty good, about 3,000 lbs. per acre with hand methods; such yields may or may not be viable commercially, but the crop is viable from a food security perspective; it is likely that pintos, black beans and garbanzos could be grown commercially. There is a belt from south of Monroe to the north side of Eugene that could be used to grow beans in rotation.

It is difficult to grow overwintered grains organically, at least in this climate, because of the growth of weeds in the spring. Farmers may need to use organic inputs and then use herbicides in the spring, resulting in a compromise crop. Many spring crops can be grown with organic practices.

### **A paradigm shift is needed, a transition in three steps:**

#### **1. Work with local farmers to shift from grass seed to food production**

If the demand is there, with some money to back it up, farmers probably could be persuaded to make the shift.

#### **2. A slow movement from conventional agriculture (which is dependent on fossil fuel inputs) to organic agriculture**

Conventional agriculture may be cost-effective now, but likely will not continue to be as the cost of fossil fuels rises.

#### **3. Shift to growing for the local area first, then export if there is a surplus.**

This is a huge shift from the way economics have worked over the last 20 years.

The availability of money for this transition is an obstacle. However, most companies have some research and development funds, and farms have land, that could be devoted to this. Consumers could organize into buying clubs to buy locally grown crops in bulk. Another option is to return to a once-common practice, in which buyers paid the farmer one-third up front. This transition will require a new way of thinking, which will need to involve city and county planning departments. It would be good to involve bankers and local investors. This area probably could overproduce, to provide food to the Portland area and maybe Seattle as well.

Harry presented a diagram of a sustainable food system in the Willamette Valley (attached). This transition is possible, but it will take buy-in by most of the population. Harry is unsure as to whether the community can make the shift in time, but it is clear that "this is what we need to do."

**Q: Have you given any thought to climate change and the way it will affect crop choice?**

A: There is radical climate change going on that is not predictable anymore. We started seeing this 10 years ago. We saw it in the vegetables right away. Dramatic changes are happening in Alaska and Australia. Change is happening rapidly. We seem to be at the southern edge of dramatic climate change, while south of us is experiencing drought. This isn't new. In the 1970s, Rodale thought that Oregon and Washington were good places to locate, based on climate projections at that time. We are well situated. According to Oregon State University, we can grow 270 crops on the Willamette Valley floor.

**Q: Can you address the economics of growing grass seed vs. growing beans?**

A: I'm not an expert on the economics of this—perhaps you should talk with one of the farmers here tonight. Part of the shift we need to make is to set up rotations so farmers may be growing a mix of crops. We may have a strange mix for a while: fuel crops, food and grass seed. It will be a matter of what land is best suited for what. If there is community support for the idea of feeding the local population first, that will change the situation for farmers, provide more security for them and help the transition.

### **“GloryBee and the Local Food System”**

**Richard Turanski, founder and president, GloryBee Foods**

**“The theme of this talk is change: the energy crisis is impacting food, and the world food supply is in crisis. The cost of all food is going to rise for years to come.”**

Where does GloryBee fit in? GloryBee is a key component in the local food system. In 1975, GloryBee began buying and selling local honey. Now, the company is focused even more on local sourcing and supplying of food. GloryBee's business is local and regional, from the Canadian border to Ashland. The long-term energy crisis and food supply problems make it wise to think locally, buy locally and minimize transportation costs. GloryBee now buys 600,000 lbs. of beans and legumes, most of which are not grown locally. GloryBee is in a key position to be a supportive, sustainable, local supplier, supporting sustainable agriculture within our own region. All of GloryBee's resources are already dedicated to this. Contracting with regional manufacturers in the Pacific Northwest is something the company already does, so contracting with local farmers to grow crops is something the business already does and is looking to do more of.

#### **Products that could be sourced locally include:**

- honey
- beans and legumes
- dried fruit
- grains

**GloryBee's part of the solution:**

- source ingredients from new local crops
- supply local customers with ingredients (already in progress)
- continue to grow and stay competitive with national companies in our region
- develop a new, "green" facility close to other players in the local food system.

GloryBee believes in and is part of the in the local food system, and will do its best to support this system. Its competition is national companies. The company has been growing by 15% annually, and will likely double over the next 5-7 years. This growth has led to the need for a new site. GloryBee has invested in a new location, the only suitable location the company could find, that is located within the urban growth boundary (UGB) and would provide enough land to grow the facility and serve the company's needs for years to come. This is a family business, and the owners' intent is to keep it a local/regional business. It is important to keep the site close to Eugene, as that is best for the food system and for the company's more than 130 employees. However, GloryBee has been facing significant challenges in its attempts to develop the site, focusing on public and government concerns about development. Many people don't want anyone developing in the UGB.

The average person doesn't understand how much of a crisis is looming in the food supply. People have supported protecting Willamette Valley farmland from being developed into non-farm enterprises. GloryBee is asking for support in helping to develop a farm-related enterprise by supporting GloryBee in locating where the company has purchased its site. It is important to assess and balance all the diverse needs of the community, and work together to create a sustainable community food system in the future.

**Q: Who needs to be influenced the most to support your proposal?**

A: The most ecologically concerned people—"the people of the Earth." People need to understand this is the most important aspect of sustainability. We have a unique community in Eugene, but the coming food crisis and the importance of supporting food processors and distributors in maintaining a sustainable food system isn't really understood.

**Q: Is the 15% growth factor net or gross?**

A: Gross.

Q: Going back to the idea of helping to subsidize the farmer by putting up money up front—could you consider this as part of R&D?

A: I have paid people up to 25% to guarantee a price on a crop. That means price control—the price goes up on subsequent loads. I do this because I am re-selling to a manufacturer at a predetermined contract price.

**Q: So you are already doing this.**

A: Yes.

**Q: Why does GloryBee need to move?**

A: We have outgrown these facilities and are renting more and more space; we have five other facilities around town. It is inefficient and adds to our costs to always be transporting among them. And we're selling 15% more every year, and this has been going on for five years. There's no reason for me to think our rate of growth will slow down.

**Q: In your new facility, if someone was growing 50 acres of beans, would there be room for storage? This is what I wonder about—if crops are grown on the valley floor, where will they be stored?**

A: We could store the harvest from fifty acres of beans easily. We are planning to build a 120,000 square foot warehouse. We could still rent an outside warehouse for further storage if needed. This is part of what we're doing already.

### **Denise Griewisch, executive director, FOOD for Lane County**

FOOD for Lane County does not address food security as much as food insecurity, which is a continuing problem. People suffering unemployment or other economic challenges don't always have the level of food security they need. Over the past several years, food banks around the country have had a decrease in supplies from their usual food resources, which are the federal food commodity program and donations from food manufacturers and processors. The economy is affecting those sources. Food producers are finding secondary markets for food that they used to donate to food banks. The federal commodity program is declining steadily both in terms of money allocated by Congress and surplus food donated by farmers. In the long term, food insecurity is a continuing problem for our society.

Any food resource that contains some protein, is easy to store and has a long shelf life, is good for FOOD for Lane County. The agency can use such items, like lentils and grains, to process in its kitchen. The agency also supports the idea of converting some of the arable land in the area to food production.

### **Robert Serrano, vice president of technical services, Grain Millers, Inc.**

Grain Millers tries to be a good neighbor. The company also has grown, and has had an increasing need for raw materials—grains such as oat, wheat, barley and rye. The cost of all these commodities has been increasing. Grain Millers also has outgrown its facilities, has purchased land north of Eugene, and is facing similar issues to GloryBee.

When Robert moved to Eugene 20 years ago, Grain Millers located its mill here partly because the company was sourcing grains locally, but this is no longer the case. The company mills 50,000 tons of grain every year, almost all of which comes from out of state. One reason is that so far, there has been no stimulus for growing beans and grains locally. Also, the kind of conversation we are having tonight hasn't happened in the past. Grain Millers has enough milling capacity to export, and is interested in dialogue to promote the transition to growing grains locally. The land in the Willamette Valley can grow beautiful grain crops like oats. Perhaps the time is ripe for transition.

When Grain Millers began, organics were a very small part of the grain market, less than 1%. Currently, the capacity of the mill for organic grains is more than 20%, and Grain Miller is forecasting more growth. The company is now bringing this grain in from Canada. Grain Millers also is pursuing another niche in selling gluten-free oats. Oats have gluten, but it is different from wheat protein. Niche crops like gluten-free oats, which can be sold at a premium, could help subsidize farmers in transitioning to growing grains. The company is willing to partner with local growers to do this; the market is already there. The Willamette Valley could be great for gluten-free oats; land that is used for growing wheat also can grow oats as a rotation crop.

**Q: What kind of resistance are you meeting to your planned move?**

A: The typical attitude of "Don't grow too much, we want to keep this area as just a college town."

**Q: Is the resistance more on the county level, or from Junction City or Eugene?**

A: Not from Junction City, we have nothing but praise for them. They may annex the land that Grain Millers has purchased; hopefully they will.

**Q: So it's more on this end of the valley.**

A: Yes.

## **General Q & A:**

**Q: Do you want to have a meeting with the environmental and land use communities about your projects?**

**Turanski:** Yes. We look forward to an open and honest communication.

**Q: What kind of message do you want to send to these communities?**

**Turanski:** We have the same kinds of concerns they have about our environment—we are trying to be a sustainable company, be as green as possible, and aim to get to the next level.

**Serrano:** We want an open dialogue. This is part of being a good neighbor. We are trying to build an exemplary, sustainable facility. We are studying and considering features such as how to generate our own power, for example. We are looking at this from

every angle and we are really committed.

**Q: Why do you need to develop undeveloped land?**

**Serrano:** We need sufficient land for storage. We need to have enough land to store millions of pounds of grain—as many as 50 or 100 rail cars at a time. Now we are landlocked and encroaching into the neighborhood in terms of noise, emissions and traffic congestion. By moving, we would remove those impacts from downtown.

**Turanski:** We did a thorough search of the Eugene area for any existing facilities. Our employees wanted to stay near the community here. There were no other facilities that would meet our needs. There are not many warehouses for sale in the Eugene-Springfield area that are over 100,000 square feet. The piece of land we found was at least 15 acres and had rail access, both of which we need.

**Q: I know of one site near I-5 that was already developed and had been available forever. Why couldn't there be another site like that? It seems it would be a natural place to start with a site that was already developed.**

**Turanski:** We looked at that site, 30 or 60 acres. There were some problems. We did an employee survey, and it turned out to be too far away. We needed to make a decision that balanced all the issues at play.

**Q: Have you done a cost analysis of what it costs to grow something in the valley as compared to importing from elsewhere?**

**MacCormack:** Not yet. Thanks to a donation, we now have a combine, so we can factor in the cost of a combine this year.

**Q: Are there grass seed growers who are willing to entertain converting to grains and beans?**

**A:** There are at least two sitting here tonight. There are people looking around, trying to figure out what is going to happen. Growers have a lot of factors to consider in making a transition. We are trying to bring leadership to this situation and focus it in a direction that isn't too alien from what was going on in the valley before.

**Q: Could you set up a pilot with Dick (Turanski)?**

**MacCormack:** Yes. I've been working to organize buyers on a smaller level. If we can do all this at once, there is not just one transition happening. This is why I have had to rewrite the transition document. The transition is huge and will require a real change in our thinking—mostly what we're doing now is growing for export.

**Q: There were once almost 300,000 acres of wheat grown in the Willamette Valley. What kind of diversity is there? How many different types of wheat can we grow here?**

**MacCormack:** There was a lot grown here in the old days. Most grown here now is a white, durum-type wheat. This overwinters and takes advantage of the rain in the winter

and a wider diversity of land. Does anyone know how many acres are planted in wheat?

**Q: As recently at 1976, there were 270,000 acres of wheat. Right now it's probably only about 50,000.**

**Participant:** There was about 125,000 acres this year in the valley.

**Q: That's a huge change since 2005.**

**Participant:** Yes, because of the price of wheat.

**MacCormack:** Part of what we're dealing with is the world economic situation. This isn't stable economically or in terms of local food security. I went to a biofuels conference in the Midwest about five years ago where a lot of large corporations were represented; one big argument in favor of biofuels is that it stabilizes the local farming economy so farmers aren't always chasing dollars.

**Participant:** We only grow a soft white winter wheat here. It's used in cake flour and pancakes, not for bread. We don't recommend that you grow bread wheat in the valley. It's too wet to make the protein for bread.

**Q: Even spelt?**

**Participant:** Spelt is different.

**MacCormack:** I grew spelt and when I went to Germany, I discovered they had completely different facilities for cleaning and processing spelt. The husk on it is outrageous.

**Participant:** We will still need to import wheat for bread.

**Q: What about corn?**

**MacCormack:** I deliberately left corn out. Dry corn is problematic here. If you have a long-season crop and you start getting moisture in September—even just air moisture, not rain—you can't dry it down unless you have drying facilities. Mostly what's grown here is sweet corn.

**Q: Do we have facilities for processing grains and beans, maybe something cooperative?**

**Serrano:** Grains, definitely; not millet, but the major crops—wheat, oats, barley and rye.

**Turanski:** Beans, no. If we could grow enough beans here, someone would have to build a processing facility. That would be a good thing.

**MacCormack:** Ten Rivers Food Web just had a former OSU student do a project on this, looking at wheat and tomatoes as processing crops on the valley floor. In Corvallis, the mayor and city council have talked about wanting to attract a processing plant. This is all talk at this point. One thing we discover when we do food assessment surveys is that everyone wants processed tomatoes. It's never been done here, and the folks at OSU say this can't be done. However, some things can work on a smaller scale that won't work on a larger scale. If you put in smaller, decentralized plants, like Sweet Creek in Noti, it could be done.

**Q: When Agripac moved out, that was a big loss for the area. In order to be**

**sustainable locally, we are missing a cannery and slaughterhouse. Who could provide these? Do you know likely candidates? The food system is like an engine—we need all the parts to get it running.**

**Turanski:** We have worked with the State of Oregon's economic development department. We have the opportunity to invite other people to be part of what we're doing. At the state level, they are interested in expanding the natural foods industry in Oregon. There are good reasons why businesses may want to settle here.

**Q: Why can't we grow bread wheat here? People did in the past. Does the interior grow a better bread wheat that we can't compete with? Or can bread wheat simply not be grown here?**

**Participant:** You can grow it, but it may not be something you would want to eat. Older wheats aren't of the quality we have now.

**MacCormack:** This is disputed in the new Oregon Tilth magazine. One researcher at Washington State University is finding that it takes twice as much of the modern wheats to get the same amount of nutrition as in the older wheats. We need to do more research in the OSU library as to what was grown here before 1950—not necessarily to repeat what was done before, but to learn from it. The paradigms developed around 1950 won't serve us very well as fossil fuels become too expensive.

**Q: How are you changing your document describing the transition needed in agriculture?**

**MacCormack:** The original document focused on one transition (from chemically based agriculture to organic) plus some information on nutrition. The new one deals with soil biology, based on seven years' worth of work with the Soil Food Web in Corvallis. Research in the last 10 years has shown that compost tea can be used to put the biology back in the soil on larger pieces of land. Some of this work was pioneered in Eugene and Corvallis. This is being done all over the world now. As a consequence, the document has gone from a 90-page document to a 300-page document.

**Q: Can you say more about red and white wheat?**

**Participant:** When you're talking about bread, it's all about protein. Here in the valley we have comparatively high moisture. When you get higher yields, you dilute your protein, so we tend to get low protein; that's why a hard red or hard white wheat wouldn't be a good adaptation for this region. In the plains or in eastern Oregon, in a higher-stress environment with lower yield potentials, you can grow a hard red or white wheat more reliably.

**MacCormack:** If you talk with nutritionists, you'll see the situation is more complicated than that.

# DYNAMIC ORGANIZATION FOR CO-OPERATIVE COUNCILING

**ADVOCACY:** Any member can introduce or advocate on behalf of an agenda item. Every agenda item evolves out of the group's declared purpose, and the actions perceived necessary to fulfill the collective purpose.

*Relates to Proposed Decisions & Actions*

**FACILITATION:** Paces the meeting and mediates between the group and any proposal being advocated, to ensure that the significance and consequences are thoroughly understood.

*Relates to "Present Mind"*

**ONGOING AGENDA DEVELOPMENT:** Identifies and gathers issues of new or renewed concern to group members, and encourages members to bring issues and proposed solutions forward as items for future agendas.

*Relates to "Future Mind"*

**MEETING "SCRIBE" - ARCHIVAL OF DISCUSSIONS, DECISIONS & POLICIES:** Visually posts key concepts as they emerge in the meeting, formulates statements that express "sense of the meeting" to summarize decisions, prepares minutes for approval, archives, and reconciles current choices & decisions with earlier policy and decision making.

*Relates to "Past Mind"*

**This design is intended to optimize organizations committed to horizontal, non-hierarchical, self-organizing, effective group dynamics.**

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