

CNFC Board Meeting September 9, 2013

In attendance: De, Theresa, Diana, Russ, Ray, Madhurima, Josee, Jenn and Eric

Presentation by David R on wastewater disposal systems:

Background: Old septic was condemned. Current waste is pumped out.

Conventional systems are based on settling of wastes in tanks with liquid at top going to septic field. Shallow burial through many shallow pipes. Needs aerobic bacteria.

Wastewater disposal systems need to be built by registered waste water installer. David thought we could consider an alternative system – solar aquatic system.

Solar aquatic systems operate with the premise that wastewater is resource not a problem. Several are operating in BC (UBC, Christina Lake, and Errington).

Solar aquatic systems consist of a big greenhouse and a constructive wetland in the open. In the greenhouse we have vertical tanks made of a translucent material. Outside there is a blending tank, The plants in the silos inside the greenhouse, collect aerobic bacteria in the root zone. Plants are growing in a hydroponic system. The bacteria around the roots of the plants very rapidly break down the digestible material in the waste water. The odor disappears very quickly. There is odor in the blending tank where it starts. It goes through plant filled tanks, through filtration steps and eventually to field. By the time the effluent gets there the water is essentially drinking water. It is allowed to be used for permanently piped irrigation systems. The greenhouse has more space in it than it needs. By building in surplus greenhouse space this allows one to scale up the system or use the space to grow non-edibles(e.g. bedding plants).

Preliminary budget: it was put together for the purpose of the grant but it was a very fluid budget and not fixed. We can decrease the bottom line with Cortes Island resourcefulness (i.e. tapping into Cortes Island Volunteers.) Budget figure we came up with was \$180,000. David thinks we can come way under budget.

Greenhouse building would take up area similar to tanks in a conventional system. Artificial wetland is only about 2 feet deep – not requiring much excavation.

Questions from board/Answers from David:

What is energy budget for aeration?

Answer is that it is higher than conventional system. Current conventional systems have pumps but this system has more.

What happens in power outage?

It is sized to be able to accept inflow for a certain amount of time e.g. run without power input for 36 hours.

What size generator is needed if we want to have a back up?

Would need generator in the 10KW size to generate power.

Will it freeze?

No it won't freeze with regular activity there will be plenty of heat generated. But it can't go below the metabolic level of the plants – in the ballpark of 10 degrees C. Would probably need double glazing. Plastic would be preferred.

How painful is a restart?

You have to reseed tanks with fresh plant material and then in days it will kick-in. Water hyacinth is the work horse of the system plus there are snails. Kim Rink has experimented with all sorts

Any risk of species escape in downstream water? Any worries about snail species or weed species escaping into Hague lake?

No, not under normal operating conditions. Because filter takes out anything larger than 10 microns. Of course a large earthquake damaging the system could cause escape.

What maintenance cycle is on the filtration stage?

Mostly automated with backwash. Periodically you have to change the sand. It can be reused in compost system. The filters are replaced every 3 months. You do have to have a technician that looks after this.

The plant at Errington (which is similar in size to what we want) has part time operator. She works at 1 day per week. Most of her work is harvesting excess plant material . Filtration changes are easy to do and a local can be trained to do. The designer needs to check in on the system a few times a year at first and down the road.

How to pay for the wages need for our septic system gardener?

Bedding plants, compost. Tourist attraction.

How deep do pipes need to be?

Pipes are buried below the frost line. But dosed pipes don't need to be as deep.

Will health inspector be reviewing this system?

No, he will have no relationship to system. He will only inspect the piece of paper saying that we have current permit for the waste-water system.

Is there any special licensing fee that has to be paid as an operator?

Not until we had a much larger system.

With the modular system we can add silos to the greenhouse – but what about the wetland?

David recommends greenhouse be constructed that allows to double the size. Similar we might want to expand wetland (by two).

Would wildlife be interested?

No open water standing pools in wetland. Shouldn't attract wildlife.

How long would something of this size take to build it?

Construction - 1- 2months?

Could we open it up to RV waste?

No, there are chemicals in it.

We have this grant but it doesn't cover the whole cost. Where do we start?
50 from Go Green grant and 50 from private.

We don't need much of a system at this time. With 3-4 months notice we could size up.

Potentially 4 tanks and piping could be used to start. We need to finish full building 25% budget 45-50 K and piping in immediate vicinity – inlet wetland pipes blending tank:.

Ongoing operating costs. \$120-160 per week at \$15-20 per hour.

Kim offered \$1800-2000 worth of parts. Plants and components.

David is confident he could tap into many donations.

Is it possible to get refurbished components?
David says maybe the electrical components. But David says get new pumps.

How much is gravity fed?
The feed into it is gravity but inflow from south side of the building needs to be pumped. All recirculation is pumped.

What are Hydro costs associated with plant in Errington?
David will get some figures for us.

With conventional system we would probably need to pump out every 2-3 years. He says in this system we might need a pump out every 5 years but it is a much smaller amount since the system will continually be breaking down the sludge and making it available as nutrients. For example if a lot of sand is washed into the system this would add up as would any inorganic inputs.

David shared some concept sketches for landscaping.

Once it is running, we must maintain nutrient level to keep the plants alive. It will need a kickstart it with a truckload of manure at the very beginning.

\$300-400 dollars a month. Currently spending \$1000 on average per month.

Agenda for meeting:

Approval of agenda
Approval of minutes from last meeting
GM Report
Financial Update
Land Financing Update
Proposal to Rent Pump House Space
Liquor License Update
Ron Bazar proposal for GMO
Capital Projects

Insurance for Directors
Code of Ethics
Tenancy agreement
Committee Reports
Café
Marketing

BREAK

Land Purchase Mgmt Issue:

Executive Session

Meeting Schedule
Wages and Salaries
Closing Evaluation
Meeting Adjourns

Agenda:

De moved we approve the agenda . Theresa seconded. All approved

Approval of Previous Minutes

De moves that we approve the previous minutes, Theresa seconded it, approved by all.

GM Report:

We need another cheque-signer. Currently it is Eric, Marilyn, De and Kelly. De moved we replace Kelly with Josee, Theresa seconded. All approved.

(Marilyn Fitzmaurice is the bookkeeper)

Financial Update (Eric):

Sales this year are up about 10% (first 6 months).

We are planning to take inventory in a week to tell us actual margin and actual loss.

We are caught up on all our bills- within 30 days with everyone. This past Friday there were still funds in the account after paying the bills. De has heard that tourist rate is down and other businesses' revenues are down.

Diana noticed her tags scan lines are wearing off.

Land Financing:

Eric talked to credit union about the loan. They said they require 20 percent down. They were not open to taking us on. So we can go back to Vancity.

Proposal to rent pump house space:

It has two pump systems – one is connected to well. The other is community water system serving some of the households down Austin road.

The Austin Housing Coop. Need to decide if they keep pumphouse here or need to build it. The two systems don't affect each other. What is reasonable rent for half a

pumphouse? Table this until we get the lease. Josee will report back that we are considering and that we have no intention of evicting them.

Liquor license update:

We tried to renew it last spring. But untied loose ends we couldn't renew it. We have to start from scratch. The liquor license control board said its paperwork and building inspection. De mentions there are strong feelings around this. Good decision strategically for the café. Had event where someone brought license and alcohol to café – legitimately. Do we want café to serve beer and wine on regular basis or do we want it as a special event liquor license. Eric will look at it in his spare time.

Non-GMO proposal from Ron Bazar:

Ron wants letter to be written to be published in the next enews.

We agreed to post in member center.. Members letter section.

Jen will reach out to Ron, to apologize that not responding to him more timely – as we had just had recent meeting when we got his letter. Ask permission to post letter in letters section, tell him we are considering how to best link his letter to our next newsletter and invite him to be involved in the planning of the guest speaker and proposal for how to do some more labeling in the store.

Capital Projects:

Parking lot - done.

Septic tank – in process

Marketing:

Phone book ad

Brochure and questionnaire going out

Update challenge grant:

Eric will contact a few people about doing business plan

Solar aquatics challenge Grant:

De moved that we accept grant, Theresa seconded. All in favour. We agreed to put money in separate account.

Theresa will ask terms of accepting grant, how much of Sandra's time has been spent and what is to be spent? And Theresa will make it clear we are not to spend any money from it at this time.

Financing – Vancity:

They want to see contingency fund.

Fundraising Drive:

Collected \$142 in August.

Jamal and Derek were going to do phone call. Jamal set up online donation page – You Care. This goes directly into our pay pal account.

Theresa edited Correen's letter for our review.
Eric has set up stuff at the till and we can set up separate bank account.

Fundraising ideas were thrown around....

CMHC Grant:

Ray, representing the board, talked to Krista to ask her questions about this.

CNFC has been awarded grant for seed study of housing study. Maximum \$2500 contract. Ray asked Krista – how are you going to do this? Has done a lot of work on this previously. How are you going to interview people?

The board approves Krista's contract.
Jenn will let Krista know this and that we will require Krista to solicit feedback from the Tideline and marketer for 4 consecutive weeks

Insurance:

The cost of additional coverage \$1100 per year. Ray and Diana's opinion of policy is that is acceptable. Directors were covered, employees were covered. This is the same insurance operator that holds our business insurance.

De moves that we empower Eric and call cooperators and approve expenditure of \$1100 per year more or less. Ray seconded. All in favor.

Next meeting will be Wednesday October 9th.