



**MINUTES  
DEVILS LAKE WATER IMPROVEMENT DISTRICT**

**SPECIAL MEETING  
Vegetation Management Workshop**

**DLWID OFFICE  
February 20, 2007  
6:00 P.M.**

**PRESENT:** Brian Green  
Otis Winchester  
Smokey Aschenbrenner  
Jack Strayer  
Robert Landhuis

**ABSENT:** None

**AUDIENCE:** None

**STAFF:** Paul Robertson

**MEDIA:** None

Winchester: This meeting is to discuss vegetation management. I guess there's no official action.

Robertson: We are discussing things. The Press Release stated that we weren't going to do anything concrete.

Strayer: Did you look up the website that I sent you? It looked like they laid some of the groundwork that we want to do. What is a noxious weed? They go through the different kinds of weeds and how to control them. It might be a place to start.

Green: Is noxious different from non-native?

Robertson: Yeah, people define it strictly. As long as you know which weeds you are concerned about. Noxious is generally a species that takes off even if it is a native and is something you don't want. Non-native could be not-invasive because it doesn't do very well. Non-native introduced species generally fare poorly.

Green: Have we had any problems with native species?

Robertson: I don't think so. Maybe in the '50's, because of all the nutrients. Once the invasive is in there. The milfoil. That's about it. They don't have the viruses, weevils and bacteria in the water. I think that desirable or undesirable is a really good term.

Strayer: We need to define what we need to control. Fifty feet out from the shore. We need some criteria.

Green: It's hard to define.

Strayer: We need some methods of control—should we go to the edge of the lake? Or is that the homeowner's responsibility? There are some things they can do. Chemicals and cutting.

Robertson: If you were trying to use a vegetation harvester, you would have a difficult time.

Landhuis: Are there ways to control grass carp?

Robertson: No. I say that cautiously.

Landhuis: We do want some vegetation. If we get a bunch of noxious stuff and throw in carp, and before they can take everything out of the lake again, can we get rid of them?

Robertson: No. Not in a lake of this size. You can get new ones with radio tags in them with sensors. I'm not sure that they are GPS; I do not understand. They are like the tags

in the salmon. First off, if you go scanning, you will spook them. 95% of your attempt is to sneak up on them.

Landhuis: They can be fished.

Robertson: We could shoot them with bows instead of feeding them, or, you could make a trap. Maybe people haven't tried

Strayer: It seems the best thing to do would be to sell them to other lakes.

Robertson: Other lakes in other states. Not in Oregon.

Landhuis: Devils Lake cannot have them now either.

Strayer: I've seen milfoil up and down the coast.

Aschenbrenner: We are unique. We are the only lake that doesn't have a weed problem now. Supposedly, now we've got 500 to 1000 [carp] and that's easier to control. We are not talking about a lot of money and a lot of fish. I would suggest that we try to get a permit or at least something from the fish department that we can have the opportunity to put in some more if we want to.

Winchester: To buy some time.

Aschenbrenner: We are not going to be able to do it in six months. It will probably take six months or a year.

Landhuis: The law makes sense, but not here in Devils Lake. We are not contaminating other waterways with an invasive species.

Green: Even the guys consulting for Solar Bees said that. Joseph Eilers.

Robertson: One concern that the state has is that people harvested them and took them to their own private ponds. You'd have to take our whole stocking program to make a difference. There is a chance for them to be transported. People want to take them because they have weeds.

Green: The fish are not going to reproduce.

Aschenbrenner: If they find some in a private lake, they can pursue it. If a person wants one, they can drive up to Washington and get one. They are legal there, I understand.

Green: They have to have a pond. So we are out four or five fish and they don't affect anybody.

Robertson: As long as they are closed off from other water bodies. DLWID is also banned from applying by being a government entity. We would have to apply for an appeal.

Aschenbrenner: I think we could make a good case. It's successful. Have them suggest something else. And they don't have anything else.

Winchester: We had about six steps to go through. One of them is that we have to map the lake.

Aschenbrenner: We had to get a surveyor and go around and survey the lake, We are going to have to get a special exclusion that says, yes, we agree that you can get 500 more. We should ask them to come down and study it.

Green: We might have to start the process by filling out an application, and then get rejected. Then start the next step.

Landhuis: The point now is to get started on it.

Strayer: You can't start until you're injured. Then you have a cause for action.

Landhuis: They are dying off and disappearing.

Robertson: There are just some small sprigs [of weeds] last fall. I can't identify them they are so small.

Landhuis: Milfoil is the smallest on the menu.

Robertson: The biggest argument about getting more [carp] is we claim we want some weeds, but we are not giving ourselves this option. The state would say you are asking for the grass to be completely eradicated. Catch - 22

Green: Carp have to have the PIT tags. We would have to fill out a permanent application.

Landhuis: They are going to eat everything first except the milfoil.

Strayer: It looks like they've [in Washington] had some experience for selective outbreaks for chemicals such as 24D. Could be a partial stop-gap.

Landhuis: It is a fast acting herbicide.

Robertson: Yeah

Green: Who is the ODFW representative?

Robertson: Bob Buckman is the highest ranking [person].

Landhuis: How is 24D Applied?

Robertson: You can dump it out of a gallon container. There could be granular, also. Liquids are more effective.

Landhuis: Is that like Crossbow?

Robertson: I'm not familiar with Crossbow.

Strayer: I have a neighbor that is a farmer. Before we had grass carp, he had a farm pond. He brought some chemicals and his weeds were disappearing.

Robertson: An interesting idea is that if we are unable to treat weeds, what kind of risks are we putting in the lake. Whatever works--we don't want that. We wouldn't want homeowners applying herbicides because the quantities and varieties are many. If we went to vegetation harvesting and left it up to the homeowners to use herbicides, they might use unsafe or not preferred ones.

Green: Wouldn't they need individual permits?

Robertson: The Supreme Court says you have to have discharge permits. Talent Irrigation District. By applying this you are discharging and need a permit. That would be a NPDES permit. Maybe it's the Oregon Supreme court. There is a potential to have an okay, but it is not easy to get a permit—a five year process.

Aschenbrenner: Or people just go down and dump it in the night time.

Landhuis: The main reason we want some grasses is for other fish [to flourish].

Strayer: For ecology too, for oxygen, also; plants place oxygen in the water.

Robertson: And break down chemicals.

Green: What is the effect of Solar Bees? You would have some plant grown left if it doesn't affect native plant growth.

Robertson: Apparently, the way the Solar Bees interact with the chemicals is making it such that there aren't such an abundance of nutrients. There would be an impact on the non-native species.

Green: Conversely, there would not be that much affect on the native stuff.

Robertson: 99% of the systems in America if you are getting rid of the nutrients you are doing yourself a favor. You are going to harm some of the native plants potentially, but only after reducing the non-natives dramatically. We have a surplus of nutrients. I would hope that it would be a successful thing if we tried it, it is cutting edge. At the same level, it is just putting oxygen back.

Landhuis: It's a pretty good way of doing it.

Robertson: That's debatable. Lake Oswego does not want Solar Bees. I figured it was based on aesthetics. They can afford to run a wastewater treatment plant out in the middle of their lake.

Green: I know it's pretty noisy. Hydroelectric power to do it...they are committed

Robertson: It's not perfect.

Winchester: Don't they have a big staff too?

Robertson: They have a really big staff. It's kind of nice to have wealthy friends. I think that there have been technologies based on wind where you are spinning to turn the drive shaft. Getting oxygen to the sediment is healthy...especially in our muddy, uncolidated bottom.

Landhuis: The Solar Bees seem to be pretty effective.

Robertson: I remember in Vermont they had these blooms of cyanobacteria. I was at work as a Wastewater treatment plant operator and saw Solar Bees and thought they would be perfect. They are trying to produce 1 mg of Oxygen per liter. You can have an aerobic environment to break down the soils much quicker. There is no O<sub>2</sub> in the muck at the water sediment interface. If we can augment that we will breakdown that sediment. In a large scale like Lake Oswego, they are just moving surface water and pulling up bottom water. But, not a lot, like your aquarium.

When we were looking at Solar Bees and had the down drafts, it must take water from the bottom. The water at the top has to come from the bottom. Something's got to move down there.

Landhuis: Revisiting 24D. If that realistically gets rid of milfoil within 48 hours that would be ideal if it doesn't get rid of the other stuff.

Green: Your chart says the roots can be dead within 48 hours?

Robertson: It's systemic that would kill all the way to the root structure.

Landhuis: Fast acting.

Green: How do you do a spot treatment?

Robertson: What it is is really intensive treatment. In order to keep 1 part per million, you are going to have to add a lot unless the water is completely still.

Strayer: It says it kills some of them and hand-pulling does the rest. It is supposed to be in an area where stuff is not moving.

Landhuis: If it gets to the surface, you could spray the surface.

Robertson: That might be part of it. The herbicide may have an affinity to the plant, making it almost like a contact herbicide.

Aschenbrenner: The liquid is there for 30 days. Stay off the lake for 30 days

Robertson: You would need a NPDES permit.

Landhuis: We would have a public relations issue.

Winchester: Like 30 days of hydroplane races.

Robertson: It cannot be used in salmon-bearing waters—the granules. There is a court decision there, too.

Green: Do we have any idea what spot treatment would cost?

Robertson: No, I haven't investigated these options because I cannot support them. As a scientist it is difficult.

Landhuis: We could change the name of it.

Green: Like "Lake Savior".

Robertson: Some of these trade names are funky like that. They've got New York City marketing departments working on names.

Landhuis: Once we are out of chemicals where do we go?

Robertson: It is a three-prong thing, including physical treatment, chemical treatments and biological treatments.

Aschenbrenner: Do you think we could learn something from Solar Bees?

Robertson: Yes, it's difficult. We want it to be the whole length of [the lake]. We could learn about the DO, phytoplankton structure. Those types of things would be telling toward the potential success of this. You are potentially driving a system toward more favorable ecology. There is a limit unless we could get a big turbidity curtain and could isolate 40 acres [near the south end]. If we were to do any kind of small-scale project that would be the first area I would choose. The winds are not going to start until right here. [Points to map]. This area is completely flat. It's blowing here and here.

Green: The flattest place on the lake is north at the Sand Point entrance. How many acres is that?

Robertson: I'm not a good estimator.

Strayer: 10 acres?

Green: Is the best information just other lakes?

Robertson: We are continually looking at other lakes and their successes and failures. I've spoken with two lake managers, including Hidden Valley. Neither of them was convinced of any silver bullet. Both were convinced that it put O2 down there and it helped.

Green: Is Solar Bees putting their spin on what the lake people said?

Robertson: Yeah I think it is a bit manufactured.

Strayer: Some of those statements were taken in 03.

Green: He claims that they are using chemicals for weed control. Maybe after 06 it was updated. They would have another update soon.

Robertson: There are 10.1 acres in that little area. 535 feet is this distance. Are they claiming their impact of Solar Bees is an 800-foot radius or diameter?

Green: The impact is 40 acres. 400 radius and 800 diameter. (Note: Calculation later suggest 800 radius)

Robertson: We could look at other coves. [Mentioned that he was using some software]. The leg here is 681, so this would be pretty much the extent of impact. If you have 400 feet to the center point.

Green: Even if it was open on one side, it would be a good potential for oxygenation of that area.

Robertson: If we are in a place that is kind of secluded because of the wind, you probably aren't going to get a lot of water movement. You don't get much water movement from

wind. This might be doable. The thing about the other criteria—the plankton—won't be discernible.

Landhuis: You would have to take data beforehand.

Green: Yes, and how long a period of time pre-Solar Bee study would you have to do and how much after Solar Bees? Five or six years?

Robertson: Yes, you could defend it for awhile. If that magic 40 acre number is what we are working for, we are only going to hit 8 of those acres.

Landhuis: Would you want to extend the area?

Robertson: It would not affect other water. Say, we did a polygon here or an octagon.

Landhuis: That area gets a lot of boating action. In the morning, it's nice, but boats are starting up and it gets muddy.

Robertson: I found a 40-acre polygon. I would like to find out more from other people as a first approach—if we were to lease rather than buy one outright. It is 50,000 dollars and it does take some pretty good consideration.

Strayer: Do they have any problem with people anchoring near it at Lake Stellicoom?

Robertson: No, but they [others] have the benefit of being a private lake. There is a lot of education for boat owners and landowners. They put them off the channel. Instead of having a Solar Bee where the x is, they would push it over here. What would be sensible would be to utilize a little nook here. I think that you could utilize some of the contours of the lake to hide them.

Landhuis: Didn't they recommend 16 for our lake?

Robertson: 17.

Landhuis: I don't know if they staggered those.

Green: They have some kind of schematic.

Landhuis: What is the lake? 680 [acres]? Divide that by 16 or 17.

Robertson: It's basically done on the rings that influence. If we only have a 500 foot section, we still could only go 800 down the shoreline. It's a good size lake for Solar- Bees because we do get a lot of shore to shore influence. Because, if you are in a round lake, you would have a symmetrical grid pattern. Here we could do it down the center.

Green: When I looked at them at Steilacoom, they looked a lot smaller than you would think. They aren't doing anything. You don't focus on them after awhile. That could be the biggest problem. They would need to be marked. Nothing is happening on the surface. I was looking off in the distance and couldn't see the one right next to me.

Strayer: Do we have a problem with algae collecting on the blades?

Robertson: No, you are going to get organisms; it would be like a rock in the river. They could not grow in colonial form.

Landhuis: It is an Archimedes type screw, not a propeller blade. The blade that is on the end of the shaft, if you lookdown on it, it has a lowered edge so it sort of spins and cuts the water.

Robertson: I like the machine. They are a young company. Five years. To change the world is not too much to ask. It's revolutionary, but yet it is really basic

Green: They had one in the middle between the shorelines.

Landhuis: I think we couldn't get one near the outlets there.

Robertson: You do need three or four feet of draft. As a boater, you look at that and think, "That's an obstacle course", but it's a pretty big slalom course.

Green: It's 800 feet. (Note: potentially 1600 feet)

Landhuis: I hope some of these amateurs don't try to go over them.

Robertson: We would want to find out from the lakes that recreation. These are solid, larger than a dock.

Landhuis: The tube down to the bottom is flexible.

Green: It's anchored from the bottom, and kind of bobs and weaves on top.

Robertson: I'm not afraid of the design--as far as being a hazard. The idea of bringing one of them into the lake—one way of getting people to comment and get some feedback.

Landhuis: Is there a quick study you can do? You wouldn't have to sample everything?

Robertson: No. We could have three or four months' data. Once you get a year, then you need three years. It's more art than science trying to outguess it. Studies are just studies.

It's really the interpretation. I think the dissolved oxygen would speak fathoms.

Landhuis: If we could do the secchi depth--get four feet better on average, than 800 feet away from it, it would convince me.

Aschenbrenner: People would say that's because it is a different area of the lake. We could move it.

Robertson: We are talking about a big lake. Look what the sediment did here. Move it over there and say it improved this. We are talking about a big system that's going to push its way in and out.

Landhuis: We don't have tides.

Robertson: Some lakes have waves, though. It's actually rocking. Wind action is pushing the water this way. Lighter and warmer water toward one side. Gravity pushes it. That is internal seiche waves.

Green: If we put one in and other lakes were showing good results and we did not have anything to show for it [that would not be good].

Landhuis: Some lakes are not showing any results.

Robertson: When you undersize it, you fail.

Green: We could assimilate the data we have and do something like this just for Solar Bees. Use different criteria and see what they report for each. In terms of clarity and weed growth and blue-green algae and whether that lake has used a full complement and see some correlation between their results.

Strayer: Does it have a battery operated light?

Robertson: It has enough solar panels to operate during the day plus the same number of daylight hours stored in batteries for the night time. (eg 8 hours of sun = 16 hours a day operation)

Green: During summer when you have most problems, you would have the most time.

Landhuis: If we could study some lakes within driving distance. We could visit them as we travel to those areas.

Green: How about visiting on the phones? We could visit some lakes and also talk n the phone.

Robertson: About 3,000 gallons a minute go through the tube and an induced flow through the tube, but when you are pulling water through the tube, you make water here move this far.

Winchester: About a firehouse.

Landhuis: People were worried it might drag fish along. But it's not moving very fast.

Robertson: There are invasive aquatic weeds there in California.

Landhuis: I plan to go to Gilroy this summer near Monterey and Carmel, past San Francisco, about 70 miles.

Strayer: They look like a boat out there.

Robertson: Boats on the lakes don't have flags. It's visible, but it's not eye pollution.

Landhuis: We'll get some complaints of that.

Winchester: We could get them color coordinated.

Robertson: I think we were all pretty skeptical. But with a little education....I think it has a lot of potential. Your wind turbine is a competitor. They haven't had much success.

Aeration systems are competitors. This technology spawned from that technology. These are nothing more than waste water treatment technology. These are foundations of waste water treatment plants. That's what secondary treatments are. Activated sludge treatment plants are 90 percent effective. [Robertson discusses technical aspects of waste water treatment].

Strayer: What kind of maintenance and service activities are you required to do? This is one of the questions I would have.

Robertson: They have a small trolling motor. It's an electrical half-horse motor that turns pretty slow. I have pictures of it. You can see it move.

Landhuis: Would it be a danger to a kayaker's who stuck his hand in it?

Green: It sits in a frame.

Robertson: It has the distance of those pontoons and you can't get as close to it.

Strayer: So, if a boat ran into it would there be a problem?

Robertson: Yes. But, it's like a boat. There is going to be some give. It's kind of like you are in water if you hit the dock with your boat, but if you hit it with your boat, it will give.

Green: Does anyone see any other cost effective options?

Strayer: Maybe hand-pulling in some areas would be effective.

Landhuis: Is it really one weed we are talking about?

Robertson: No, it's three. Milfoil, Elodea and coontail. The milfoil is going to be in the lake as the worst one.

Landhuis: They [carp] are going to eat everything else first before the milfoil.

Robertson: [Showing the video] So, find the Solar Bee. [Discussion about its visibility]. It looked like a boat. The bridge is to the right.

Green: The entire thing sits still. You can't see anything from a distance.

Robertson: It's going about a revolution a second. There is the tie line that is keeping people away.

Landhuis: You had one good shot there where you could see the impeller moving.

Robertson: That is a foot and a half. The impeller is a foot under water and three feet from here—80 revolutions per minute.

Landhuis: There are two parts per blade.

Strayer: It operates even if there is a wind?

Robertson: Right. This is Washington. This is stormy weather. This is September. It would be a good thing to visit not just in the summer time—go in the winter time. Take a trip in the boat during the Garlic Festival.

Strayer: Do they have them on Clear Lake?

Robertson: So, this is a pretty narrow lake. A lot like Devils Lake. Long and narrow with coves. They are going to be in the middle of the lake—four or five in front of Regatta Grounds.

Green: They are 800 or 900 feet apart.

Robertson: They are 2/10ths of a mile apart. (Note: potentially 1600 feet apart or 1/4 mile apart)

Strayer: You don't buy into one set of technology; then you are not bound.

Green: My understanding is that they are more effective early in the cycle. If you have a lot of growth, it will stabilize at a lot of weed growth.

Robertson: It's more of a maintenance thing. It's a holding pattern rather than treatment. We are out in the middle of the lake and I don't see one. I'd like to shoot more video. We need good quality stuff like this.

Green: Was this their second summer?

Robertson: They put these in in November two years ago, so this was the first summer and they noticed improvement.

Green: I went onto the lake the same day at a different time. There is an outcropping for fishermen. I asked the guys how the fishing was and they told me this was the first year they had fished for five or six years because the clarity was better. They said, because they had the centrifugal water circulator out there.

Robertson: People get educated pretty quick I guess.

Landhuis: Didn't the Solar Bee people talk about fishermen who wanted to fish around the things?

Robertson: The fish like to stay around there because they are feeding off the plankton.

Landhuis: Did they ever have a weed problem?

Robertson: Yes, they have been using chemicals. There are still plenty of weeds in this lake. The blue-green algae was their biggest problem. This is the group that has historic problems. This used to be a septic system lake. Now, all the old septic systems are being pumped out. Now that they have the septic systems going out, the nutrients are not going into the lake now. They didn't get everything they wanted. They had nine Solar Bees.

Green: They had the same concentration as they recommended for Devils Lake.

Landhuis: They weren't subsidized?

Robertson: They have a lake association. They had money from the city. We have \$250,000 cash if we want to write a check on July 1. We could buy five or six.

Green: You'd have to finance them—at TLC.

Robertson: We have the power to do it. We have a tax levy. We are promising \$40,000 a year we could pay off the loan.

Green: We have the power to get a pretty good interest rate. I don't think you'd want to finance more than 25 years, maybe 15.

Landhuis: How much of our budget would we want to put into it?

Green: We could get a loan at 6.5%.

Landhuis: That's a credit union. We can't borrow from a credit union, can we? As a tax-supported body, I don't think we can borrow from a credit union. I don't think we could do it without a vote.

Robertson: I am pretty sure we can borrow against our levy.

Winchester: The City borrows.

Green: This is an idea--\$63,000 a year, over 15 years at 6.5%.

Strayer: How much would that interest verses buying what we could afford each year? Often most expensive point.

Robertson: Grants are great.

Green: Want to get a system that works outright verses putting one together.

Landhuis: Is there much drainage in their lake?

Robertson: I don't think the lakes have as much of drainage as we do. Our drainage is pretty clean because of Rock Creek.

Green: Is there any way of projecting when the fish die out and the weeds come back?

Robertson: It is a guessing match, but a lot of it is water quality. You have a longer lag time before the weeds come back with poor water quality because the light is blocked out. 1993 was the last introduction. [The carp are] 14 years old. They've outlived their life expectancy. One of the things I wanted to talk about was budgetary options. We have this \$250,000 in watershed protection funds. We could consolidate and make it one fund. We are paying maintenance fees on multiple funds when we don't need to. We can consolidate it and still have it earmarked, and also appropriate it. If we want to go after 24D in August or if we want to buy six Solar Bees and finance 12 more, we can do that without having to go through a supplemental budget. Which takes 2 months and cost \$500.

Strayer: 24D is \$600 acre. Some are more expensive

Robertson: These Solar Bees are not overpriced in their market. That's equivalent to running a weed cutter all summer long. That's pretty telling. 2001 are the oldest Solar Bees.

Green: If their useful life is 25 years, they are way not overpriced.

Strayer: Are they waiting for us to haggle with them?

Robertson: They had financing through them. We may or may not be able to take advantage of that without a bond issue. But, grants, I like grants. It's pie in the sky. Say, I'm going to get a \$250,000 grant this year and didn't budget it. We are stuck until we appropriate it.

Maybe we should add a \$250,000 grant expectation in there.

Winchester: Ask the auditor.

Strayer: If we can make an argument that there is a health issue, we might be able to get that kind of a public health grant for blue-green algae.

Landhuis: If the carp die suddenly, how long before the weeds become a problem.

Robertson: It could be five years or it could be 18 months. There are nutrients in there.

Green: It's better if we are going to go on the side of being too early rather than too late. It stabilizes weed growth.

Strayer: Like to get some confirmation from other managers.

Green: Absolutely that is what we were talking about.

Robertson: We've got a phone, we can start there, and then, visitations would have a role.

Winchester: Yeah you look them in the eye.

Robertson: You could talk to three people in a community versus one.

Strayer: Do you need to expand your monitoring for Solar Bees?

Robertson: Right now, I think it's probably close to being appropriate. From phyto & zooplankton samples that Lori took that were never analyzed. We will analyze those as a long term data sets. Steve Hoover provides nice continuity. They were in good enough condition. From that I kind of stopped doing all these cyanobacteria and zooplankton. Because we weren't going anywhere with them without any end game, but with the potential of moving on a Solar Bee probably want to ramp up again.

Strayer: Has anybody been treated from being in Devils Lake?

Robertson: Yes, people have been treated for rashes. That organism is most dominant in Devils Lake. Those are dermal toxin producers. The blue-green algae are real and they are not going away.

Strayer: Could do a survey?

Landhuis: The Portland TV stations would get hold of that and it could be ugly.

Robertson: Those press releases come from the state for beach monitoring. We are getting more and more reason to change the system.

Strayer: We would need to show cause why we needed a grant.

Landhuis: Do we have a consensus that we need to go for Solar Bees?

Green: We set a goal of trying to make a decision. By September.

Robertson: We set a goal for May.

Green: This tells us what our options are. When we had a goal-setting session, I thought it was September. We were supposed to have four goals.

Robertson: Goals for 2006-7. Identify cost and effectiveness of all known mechanisms of weed control within one year in May. [Reads all goals].

Strayer: we have weeds and algae.

Robertson: We are broader than that now.

Green: We probably didn't realize there could be one tool for both.

Landhuis: If we get a confidence level on the Solar Bees, I think it's a no-brainer.

Robertson: That, and we need to convince ourselves that we want to spend that much money and put it in the lake. It has to be a comfortable decision for the board based on the public feedback. We want it to be a success on the community side.

Landhuis: It is more bang for the buck! We can call it a green machine. Everybody likes that technology.

Strayer: Get a Grant.

Robertson: People don't care if you get a grant.

Aschenbrenner: I think we should pursue trying to get grass carp, to see if we can try to get the grass carp and if we can't get more carp at least we tried. . . people are happy now and now you want to spend  $\frac{3}{4}$  million dollars to do something else.

Green: The carp are aggravating the system.

Robertson: It's going to be a learning and relearning and re-teaching process.

Green: I agree, what is to be lost by pursuing the carp too.

Aschenbrenner: The consensus is now to develop grass carp and Solar Bees.

Green: We apply and are denied, and here is the reason.

Robertson: If we go in August and get these milfoils coming along, the appeal process may be easier—can we have carp now because the other didn't work? We are best off attacking the vegetation issue by doing it ASAP. The Solar Bees are for maintenance.

Green: Solar Bees have the potential to control weed growth and the cyanobacteria, it's Utopia.

Landhuis: I've got some ideas on how to make friendly habitat, and I think cheap and strong ways of doing that. Have you heard of Gabions? These are cages that they use for slope stabilization. There are some on East Devils Lake. Put a couple of rocks in each one and friendly vegetation and the little ones could hide out and be safe. They are underwater and it would keep out the predatory bass—instead of using Christmas trees. I think the wire cages would be fairly cheap. These are stable and are galvanized. The more roots that get in there the better.

Robertson: That would be something to look at down the road for improving fish habitat.

[Tape Ends]

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