

CALL TO ORDER

At 7:00 PM, Chairman Foster called the January 10, 2017 Regular Board Meeting of the Moses Lake Irrigation and Rehabilitation District to order. The record shows that all Directors were present as well as, General Manager, Chris Overland. Legal Counsel, Brian Iller attended via telephone. The record indicates that this meeting was recorded. The Pledge of Allegiance was then recited.

DISCUSSION OF AGENDA ITEM(S)

Chairman Foster called on the board members and the audience for discussion on any agenda items, and nothing was brought forward.

DISCUSSION OF NON-AGENDA ITEM(S)

Chairman Foster called on the board members and the audience for discussion on any non-agenda items, and nothing was brought forward.

ELECTION OF BOARD OFFICERS

Chairman Foster called on the board members for nominations for the 2017 MLIRD Board Officers. Director Perry nominated Mr. Jeff Foster for Chairman of the Board and Mr. Bill Bailey for Vice Chairman of the Board. Director Teals seconded the nomination. Being that there were no other nominations for the 2017 MLIRD Board Officers, the nominations were then closed. The motion was then carried unanimously.

APPROVAL OF THE AGENDA

Chairman Foster then called on the board members to approve the agenda. Vice Chairman Bailey moved for the approval of the agenda. Director Dexter seconded the motion. The motion was then carried unanimously.

APPROVAL OF CONSENT AGENDA

Chairman Foster called on the Board of Directors to approve the consent agenda. The consent agenda consisted of the meeting minutes from 12/13/16, the Bills/Checks (#15933 - #15967) and Voucher #1000184 totaling in \$54,139.42. Director Dexter made a motion to approve the consent agenda. Director Teals seconded the motion. Vice Chairman Bailey abstained from voting on anything related to Basin Property Management, Inc. The motion was then carried unanimously.

PRESENTATIONS

Aquatechnex – Terry McNabb

Terry McNabb gave an overview of services Aquatechnex performed for MLIRD in 2016. Aquatechnex was awarded the aquatic treatments in June of 2016. After transferring the permit to Aquatechnex, a preliminary meeting was held with General Manager, Chris Overland. Aquatechnex completed an initial lake survey to find the main areas to focus on. Terry McNabb expressed that with a lake the size of Moses Lake, you cannot kill algae in one place without it coming back in another. Aquatechnex first completed an algaecide treatment on approximately 21 acres near Moses Lake beaches before the Fourth of July weekend. Terry McNabb

mentioned that Aquatechnex has recently done work with barriers where they isolate treatment areas. These barriers may be helpful when used to isolate Moses Lake beaches. Aquatechnex treated approximately 290 acres in the 2016 Phase One aquatic weed treatments. As the summer went on, Aquatechnex took post-treatment surveys and found that nearly everywhere, with the exception of upper Parker Horn, had 100% effective control.

Terry McNabb then gave a presentation on Alum treatments. The most common in-lake technique company's use for algae is Aluminum Sulfate treatments where Aluminum Sulfate is applied to the surface of the lake. Algae are single-cell plants that do not have a root system like a tree. Algae have to get the nutrients to grow from the water, and if you drop the phosphorus levels in the lake, you drop the carrying capacity in the lake to grow algae. This also gives the more beneficial algae a more competitive advantage over the more toxin-producing algae and aluminum sulfate is the most cost effective way to accomplish that. The application that is released into the lake forms a precipitate stem cell through the water column. This has a high positive charge and captures the negative charge in which combines the algae cells and phosphorus and hits the bottom of the lake and forms a layer that keeps phosphorus from re-releasing into the sediments.

A discussion then took place on the possibility of Alum treatments in Pelican Horn because the area is somewhat isolated and fairly shallow. If awarded the 2017 Aquatic Treatments, Aquatechnex would like to start aquatic plant surveys by the middle of May and be ready to treat the lake soon after. Vice Chairman Bailey said if MLIRD treats both sides of Pelican Horn, it will be a body of water with very little movement and he is not sure if that is good, bad, or indifferent - just something to consider when looking at results. Vice Chairman Bailey asked once the treatment has been applied to the lake if the Alum will move with the water or drop to the bottom and stay with the sediment. Terry McNabb expressed that the Alum treatment goes to the bottom of the lake quickly and is not something that is drifting around the lake. Vice Chairman Bailey also asked what effect the Alum treatment will have on plant growth, and Terry McNabb said that it would potentially make the weed growth in those areas worse. He also explained that people are just realizing what some of the toxins in algae are doing, in some cases killing dogs or animals that are drinking out of the lake. Vice Chairman Bailey mentioned the toxins from algae are not an unknown problem in Moses Lake because before the USBR started releasing extra water into Moses Lake in the late 70's, Moses Lake had huge masses of blue-green algae and dogs were reported to have died from it. Vice Chairman Bailey believes having weeds over toxin-producing algae would be a better choice. Terry McNabb expressed that the weeds can be managed as well and that we don't want to kill every weed in the lake anyway because of habitat and focus on the shorelines and certain areas. Vice Chairman Bailey recalled Moses Lake not having very many weeds until the USBR started flowing extra water into the lake. Director Teals agreed and said the Clean Lakes Project was able to get rid of a lot of the algae and in doing so did indirectly cause more weeds to grow, but the work MLIRD has done in eliminating the weeds has been very successful. Director Teals really likes the idea of treating Pelican Horn with Aluminum Sulfate.

General Manager, Chris Overland then showed a video of Canyon Lake being treated with Aluminum Sulfate and how it has helped their lake. Director Dexter asked if the treatment is adding minimal Aluminum to the lake. Terry McNabb explained that Aluminum is part of the treatment. He said the Aluminum has the high positive charge and is what captures the phosphorus. General Manager, Chris Overland said that he was looking at treating Pelican Horn because to some degree the area is isolated from the rest of the lake. The north side of Pelican Horn has approximately 126

acres, and the south side of Pelican Horn has approximately 209 acres. Director Dexter asked how much an acre it cost to treat the lake with Aluminum Sulfate, and Terry McNabb stated that it could range. He explained that Aquatechnex goes out on the lake and performs jar testing right before the Alum treatments begin and looks at the pH and phosphorus levels captured in the lake and selects a chemical application rate based on that information. Terry McNabb estimated approximately 35,000 - 40,000 gallons of chemical if all of Pelican Horn were treated, at about \$75,000. He also mentioned the possibility of only treating a portion to start with and then coming back and treating the rest at a later time.

Chairman Foster was intrigued with the possibility of treating certain areas where 'curtains' have been placed and liked the idea of placing them around some of the popular swimming areas in Moses Lake. Chairman Foster expressed that he felt it would be silly to test with Alum in an area where nobody is in anyway and that MLIRD shouldn't spend money on areas north of the railroad tracks when nobody is in there. He believes if the real goal to get rid of the algae is to make it more pleasant for the recreationists, why not do it at certain swimming areas. Vice Chairman Bailey liked that idea and asked if maybe MLIRD could get the City of Moses Lake to cooperate. Terry McNabb expressed that the barriers can get expensive and it will depend on the depth of the area being barricaded off. He believes if the area is about 10 feet deep, the barrier curtain will come out to approximately \$10 - \$15 a foot. These barrier curtains would be something MLIRD could re-use every year. Director Dexter asked if the water would stay clear in all the barricaded areas all summer. Terry McNabb said the areas would probably stay clear all summer. He said an Alum treatment takes out what is in the water column, so the longevity and results is a function of how fast the water gets reloaded. If the area is very well isolated, you will get good results.

General Manager, Chris Overland stated part of the reason they thought Pelican Horn would be a great area is that it is relatively easy to isolate and the area has always shown to be a different color on aerial view maps. Director Teals mentioned MLIRD could do a presentation on Alum treatments for the Laguna residents to see if any homeowners in the Laguna area would join the District. Terry McNabb expressed that if MLIRD ever wanted Aquatechnex to speak at a meeting concerning aquatic treatments, they would be happy to. Chairman Foster then recited that he would like to see MLIRD do the Alum treatment around the swimming areas where it is going to get more visibility. Director Teals believes that homeowners in Montlake area are going to be very interested in how this is going to affect the lake in front of their homes. He believes that the people that swim in the most common swimming areas of the lake, such as Blue Heron Park or Connelly Park are just residents of Moses Lake, possibly not even ratepayers of MLIRD. Director Teals would like to see MLIRD really increase the treatment in the Montlake area of Pelican Horn, as it gets a lot of use. Chairman Foster agrees about the Montlake side of the lake just is not so sure about north of the railroad tracks. Chairman Foster would like to see the acreage of the Alum treatment split up in smaller areas around the lake. Vice Chairman Bailey also mentioned at Connelly Park treating one side of the beach and not treating the other side so MLIRD could see the difference between the two sides. General Manager, Chris Overland stated that last year on the same day at the same time, one side of the beach was pristine and the other had blue-green algae and said MLIRD would want to be careful with just making the assumption that one side was treated with Alum and the other side was not.

Director Dexter suggested that MLIRD may interest the City of Moses Lake into purchasing the barrier curtains for certain swim areas if MLIRD will treat those areas with Alum. General Manager, Chris Overland believes the barrier curtains are not going to come without problems. Terry

McNabb advised everyone that the bigger the curtain, the more wind it is going to catch. Vice Chairman Bailey said it would still be a good idea to see if the City of Moses Lake is willing to provide and maybe install the barrier curtains. Vice Chairman Bailey also likes the idea of putting a barrier curtain from the south side of Montlake Park to the island near I-90. Director Perry believes treating Montlake Park with Alum will be visible to more people, which is what MLIRD wants. Chairman Foster likes the idea of treating from the Montlake dock to the island north of I-90 it. Director Teals wants MLIRD to consider doing the whole area from the I-90 bridge north. Director Perry thinks it would be a good project to treat the whole area from the I-90 bridge north to the railroad trestle, but still curtain off from the Montlake Park dock to the island to see a comparison. Vice Chairman Bailey thinks treating the whole area would be fine but to still use the curtain, so you have an idea of what an isolated area and a non-isolated area looks like.

Director Dexter asked about the dry land aquatic treatment that was completed last year. Terry McNabb explained that there are people doing test work in irrigation canals that are trying to do the exact thing and they have had some good results and some sketchy results. He said it depends on what plant species that is present for what herbicide you can use. General Manager, Chris Overland explained that MLIRD did have some dry land aquatic treatment work done last year by a different contractor. Director Dexter asked if Terry McNabb thought dry land treating was a successful way to treat. He said Aquatechnex had done some dry land testing, but most was for canal companies because canals generally treat with a product called magnacide, which is a herbicide that you inject into the water and is known to be dangerous, so people have gone away from using it. Terry McNabb did mention that an advantage is that it doesn't cost as much because you use less herbicide. A lot of the research on treating in the dry has just gone on in the last five years. General Manager, Chris Overland does not believe MLIRD was able to tell that the dry land treatment was successful. He stated that in his opinion, there was not a huge benefit and there was no follow up with that contractor after MLIRD advertised for the 2016 aquatic weed treatments and another contractor was awarded the project. Terry McNabb said that USDA researchers are working on the dry land treatments and seeing what works and what does not. In another year, he may be able to say if you have "x" plant and you use "x" herbicide, you will get 100% results - or the opposite, the science just isn't there yet.

MLIRD STAFF REPORTS

General Manager, Chris Overland reported the following:

- Lake elevation was at 1042.74 feet as of January 10, 2017. Lake elevation hit its low point on December 4, 2016 of 1041.62 and has been rising since.
- Recent reporting currently shows flows of 99 C.F.S. through the Rocky Ford and 13 C.F.S. through Crab Creek.
- The tentative date for Lakeshore Cleanup is scheduled for Saturday, March 25, 2017.
- MLIRD has not yet received reports this month from Grant County.
- 2017 Budget is nearly ready to be presented to the Board, waiting on the Grant County reports to finalize and earmark dollars for the projects such as the dewatering system for dredging and Alum treatments on Moses Lake.
- The 2017 Assessment Roll is ready to be presented the Grant County Treasurer after it is approved by the Board of Directors. Vice Chairman Bailey then made a motion to approve the 2017 Assessment Roll. Director Perry seconded the motion. The motion was then carried unanimously.

RESOLUTIONS

Vice Chairman Bailey made a motion to approve the amendments made to MLIRD Resolution 2016-010 as of January 10, 2017. Director Teals seconded the motion. The motion was then carried unanimously.

WORKSHOP/DIRECTOR QUESTIONS and/or COMMENTS

Director Teals expressed that as it is now, the County Master Plan does not allow MLIRD to do any construction at Connelly Park, such as build a workshop or additional building to use for MLIRD Board Meetings in the future. He would like to see research done on how to amend the County Growth Management Plan, so it would allow MLIRD to possibly do construction in the future. Vice Chairman Bailey said there is an application to be filed in order to apply for changing the land use and/or the zoning and this happens once a year, usually in June or July which means the application would need to be filed quickly for this year. Vice Chairman Bailey suggested General Manager, Chris Overland call the Grant County Planning Department and speak with Damien Hooper who is the Director and get pertinent information on what the land use designation and zoning are and have him email you copies of the ordinances relevant to that. Vice Chairman Bailey suggested the information be found out now to get the application in as soon as possible. Director Teals said that was all he asked to be done so that it could at least be discussed at the next meeting. Chairman Foster also mentioned that we look into the GSA contract to see what MLIRD can and cannot do with Connelly Park per that agreement.

ADJOURNMENT

The meeting was adjourned at 8:15 PM.

Jeffrey B. Foster, Chairman

Bill Bailey, Vice Chairman

Mary Perry, Director

Kris Dexter, Director

Richard Teals, Director

By: _____
Secretary to the Board of Directors

Transcribed By: _____