



Rancho Murieta Association Memorandum

To: Ad Hoc Midge Fly Committee
From: Larry Shelton, Committee Chair
Date: April 21, 2016
Subject: Meeting

There will be a meeting of the Ad Hoc Midge Fly Committee on:
Monday, April 25, 2016 at 9 a.m.
RMA Building, 7191 Murieta Parkway

1. Call to Order.
2. Approval of Notes (3/28/16 and 4/11/16)
3. Update of Tasks
 - a. Granular Seeding
 - b. Changing Fountains
 - c. Restocking Lakes
 - d. Financing
 1. Treatments
 2. Fish
 - e. Education
 1. Flyer – printing/distribution
3. Open Discussion
4. Adjournment

**Rancho Murieta Association
Ad Hoc Committee – Midge Fly Issue
March 28, 2016**

Present

Larry Shelton, RMA Board Member
Betty Ferrero, CSD Board Member
Jane Hall, MTI Board Member

Staff

Paul Siebensohn, CSD Staff
Rod Hart, Maintenance Manager
April Mattice, Administrative Asst.

Guests

Kim Perotti
Joe Mazzone Sr.
Gail Bullen – River Valley Times

The Ad Hoc Committee for the midge fly issue met at 10:05 a.m. lead by Larry Shelton.

Midge Fly Issue Discussion

Larry Shelton presented a plan he drafted to address the midge fly problem at Laguna Joaquin and make the lake a healthy body of water. The plan includes: granular seeding of the lake beds with larvacide, change existing fountains to a diffused aeration pump system, restock the affected lakes with native fish (bass, catfish, and bluegill), routinely add fresh water to affected lakes during the summer months, educate the residents on prevention techniques, temporarily reduce the levels of Laguna Joaquin to aid in sediment removal, and install lights in open spaces to attract midge flies away from populated areas.

Paul Siebensohn explained what CSD is currently doing to address the midge fly problem. He said that BTI, a liquid insecticide, is injected into the water four times a year starting around April or May, or whenever the flies start to appear. Mr. Siebensohn said liquid BTI is more effective on mosquitoes than midge flies but that CSD has opted to use the liquid form due to the cost of the granules being about five times more. He reported that the midge flies were much worse last year due to the drought.

Betty Ferrero, assigned tasks in the plan as follows:

1. Granular seeding information and costs – Paul Siebensohn, Larry Shelton and Rod Hart
2. Addition of fountains and aeration pump system – Paul Siebensohn and Rod Hart
3. Restocking of native fish – Paul Siebensohn, Bill Ossolinski
4. Fresh water addition to lakes – Paul Siebensohn, Betty Ferrero, and Rod Hart
5. Educate residents on prevention techniques – Jane Hall, Betty Ferrero
6. Reducing level of lake to remove sediments – the group would like to avoid this step if possible.
7. Installation of lights in open spaces to attract midge flies away from residents (as suggested by Sacramento Vector Control) – Betty Ferrero
8. Financing and other options (floating islands, etc.) – Paul Siebensohn, Rod Hart, Betty Ferrero

Joe Mazzone said he read an article about a community in Florida reducing their midge fly problem by about 80% by installing the aerating fountains.

Jane Hall and Kim Perotti, both of whom live around Laguna Joaquin, are anxious to find a solution to get rid of the flies, especially after last year when the swarms were so thick.

The next meeting was set for Monday, April 11th. Mr. Siebensohn will get costs for additional chemical applications into the lake including the cost of granules vs. liquid. Mr. Hart will check into costs of changing out the fountains in the lake to a diffused aeration pump system which will include running new electrical service and four fountain heads. Mr. Mazzone and Mr. Siebensohn will look into the cost of stocking native fish into the lake.

The meeting ended at 11:45 a.m.

**Rancho Murieta Association
Ad Hoc Committee – Midge Fly Issue
April 11, 2016**

Present

Larry Shelton, RMA Board Member
Betty Ferrero, CSD Board Member
Jane Hall, MTI Board Member

Staff

Paul Siebensohn, CSD Staff
Rod Hart, Maintenance Manager
April Mattice, Administrative Asst.

Guests

Kim Perotti
Bill Ossolinski
Faye Lunsford

The Ad Hoc Committee for the midge fly issue met at 10:00 a.m. chaired by Larry Shelton.

Update of Tasks

1. Granular Seeding

Mr. Siebensohn reported the price of granular form of insecticide vs. the liquid form currently used and budgeted for by CSD. He said the insecticide in granular form would be approximately \$12,000 per application vs \$1,000 for the liquid. Mr. Shelton suggested that the granules could be used only in the areas where they think the midges are breeding. Mr. Siebensohn didn't believe that the breeding areas could be isolated, and reiterated that when the liquid is applied it is released throughout the entire lake. Mr. Shelton was concerned that the larvae were not ingesting the liquid insecticide making the application not as effective as it could be. He believes one of the best solutions for control of the midge flies is the switch from liquid to granule insecticides but understands the cost will mean additional financing which will have to come from RMA, CSD and MTI. Mr. Shelton suggested that he could ask the RMA Board for funds for the midge fly problem. He thought \$20,000 would be adequate. Ms. Hall said she would bring the matter up with the MTI Board at their next meeting.

2. Replacing Fountains

Mr. Hart reported that he and Mr. Siebensohn met regarding changing out the existing fountains in Laguna Joaquin to low spray aerating fountains. CSD has fountains, but it is still unknown if CSD will allow the fountains to be used without cost. Mr. Hart also said he is working on the cost to re-wire the pumps.

3. Restocking the Lakes

Mr. Ossolinski distributed a price list of native fish from a local fish farm that could be planted into Laguna Joaquin to help control the midge flies. The price list included fish such as: mosquito fish, bluegill, catfish, carp, bass and sunfish. Releasing catfish into the lake appealed to the group. Mr. Ossolinski also suggested using shiners, which is similar to mosquito fish, could be used. Ms. Ferrero suggested that Mr. Hart, Mr. Siebensohn, and Mr. Ossolinski work together regarding the types and sizes of the fish that could be used in the lake.

Mr. Ossolinski also provided information from Aquatic Systems Lake and Wetland Services in Florida (a lake and wetland company) which suggested increasing the oxygen level in the lake with an aeration system, using larvacides as needed, treating algae quickly to avoid problems, and adding fish that feed on the midge fly larvae.

4. Addition of Fresh Water to Lakes

As discussed at the previous meeting, Mr. Siebensohn said addition of fresh water into the lakes is limited by water permits.

5. Educational Flyer

Ms. Ferrero, Ms. Hall, and Ms. Perotti met and designed a flyer to distribute to residents around the lake with suggestions on how they can help control the midge flies around their homes. The Committee discussed how the distribution of the flyer could be handled. Printing and distribution costs weren't addressed. The Committee would like to have the flyer available for all residents of RMA, CSD, and the surrounding area.

A second flyer that Mr. Shelton worked on, addresses blue-green algae and oxygen levels in Laguna Joaquin, was also distributed and will be sent out to members of the group for their comments. Ms. Perotti would like all comments returned to her by April 15th.

The Committee would like to have flyers available at CSD, RMA, the Village, and local merchants for information on control of the midge flies and to distribute the flyers to residents who surround Laguna Joaquin.

Vote: 3 – Yes; 0- No; 0 – Abstention

The next meeting for the Ad Hoc Committee midge fly issue will be Monday, April 25, 2016 at 10:00 a.m.

The meeting ended at 12:15 p.m.

Midge Fly Committee Preliminary Funding Estimates

Pursuing the goal to clean up Laguna Joaquin Lake, the Midge Fly Committee has discussed the following items and cost estimates. This plan is a working document and has yet been ratified by the Committee.

1. Public 'Fact Sheet'

In development, to be presented at the May meeting.

Cost = \$50

2. Replace fountain pumps

Remove 5 diffused aeration pumps from CSD facility and reinstall in Laguna Joaquin Lake

Cost = \$8000 (\$1600 each), parts and labor.

3. Switch to a granular BTI (Bactimos PT) insecticide

Three applications per season, 50% of lake

Cost = \$6,000 (per application), \$23 per pound x 25 pound/acre x 10 acres (20 acre lake) (plus \$250 to apply)

4. Restock lake with fish.

(300 catfish, 200 bluegill, 200 bass)

Cost = \$5000 (estimate, working on finding outside resources)

Current fountain pumps have outlived their usefulness and do not improve the lakes oxygen levels. By replacing the fountain pumps with diffused aeration pumps, the lake will be better able to sustain a healthy environment. And hopefully by 2018 chemical treatment will no longer be required. RMA will absorb the costs for installation and parts assuming CSD donates the pumps.

Currently CSD is applying the liquid insecticide, Vectobac 12 AS, four times a year. It is Bacillus Thuringiensis Israelensis (BTI) which only attacks the adult midges while in the water. It has only been marginally effective in controlling midge flies swarms. The granular BTI is heavier than water and will sink to the bottom where the midge fly larvae are developing thus killing them before adulthood. The granular BTI (Bactimos PT) will attack the area of the lake where the larvae are hatching, and will reduce the number of applications to three per season (every 6 weeks beginning mid-May). Therefore reducing the manufactures suggested cost by about 60%. CSD's annual budget is \$5000 for the liquid BTI with two remaining applications (May and June). Additional funding for the granular BTI should begin in July 2016.

RMA's cost for 2016 (est.)

Installing Pumps - \$8000 (contingent on CSD giving RMA the pumps, wiring, and control boxes)

Granular BTI - \$3,000 (August) (\$6,000 cost shared by CSD)

Fish Stocking - \$5,000

Total - \$16,000

RMA cost for 2017 (est.)

Granular BTI - \$6,000 (two applications, May, June) (\$12,000 cost shared by CSD)

RMA cost for 2018 = \$0.00

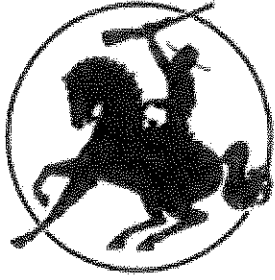
CSD additional cost for fiscal year 2015-2016 = \$0.00 (\$5,000 already contributed)

CSD cost for fiscal year 2016-2017 (est.)

Granular BTI = \$9,000 (three applications August 2016, May, June 2017) (\$5,000 already budgeted)

(\$18,000 cost shared by RMA)

CSD cost for fiscal year 2017-2018 = \$0.00

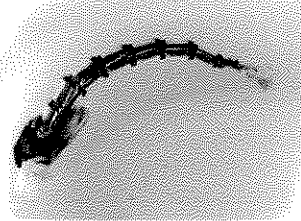


Coping with Midge Flies around Laguna Joaquin

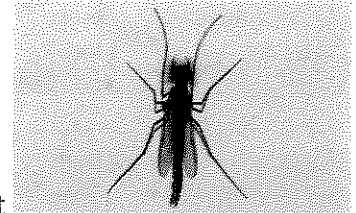
April 25, 2016

Community Newsletter

They are back Pupa



Adult



The Laguna Joaquin basin experiences a significant problem with the release of large swarms of **midge flies** during the summer months. This area is enjoyed by all members of the community who walk, run, fish and recreate around this basin. The problem exists primarily when the water temperature rises and the water becomes stagnant, providing an optimal environment for their breeding activities. When hatched, the adult **midge flies** leave the bottom of the basin and become airborne in large swarms. **Midge flies** have become a significant problem for those living and recreating around Laguna Joaquin. An Ad Hoc committee has been developed consisting of RMCS D, RMA, Fishing club, MTI, and Resident representatives in order to formulate a plan to minimize the effects of **midge flies** in the Rancho Murieta community. In the meantime, here are some suggestions on how to cope with the swarms of **midge flies** while the ad hoc committee works toward a long term solution.

Helpful Recommendations:

- Keep lights off for 45 minutes after sundown as 90% of the activity will occur before that time.
- Close windows and shades when your lights are on in the house.
- Avoid using landscape lighting during swarming.
- Place high density white lights in areas away from your home to divert midges from outdoor use areas.
- Keep "Bug Zappers", as far away from your residence as possible to maximize the effectiveness.
- Instead of pesticides, use an air blower or strong spray of water to knock down and wash away midges that collect in areas around homes.

We invite you to attend the open Ad Hoc committee meetings, which are held the second and fourth Monday of each month at 10:00 a.m. in the RMA building. For more information, please contact Larry Shelton at Shelton@ranchomurieta.org or Betty Ferraro at BFerraro@ranchomurieta.com.