



**COUNTY OF LAKE**  
**PUBLIC WORKS DEPARTMENT**

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**Brent C. Siemer**  
Public Works Director

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To all interested lakefront owners:

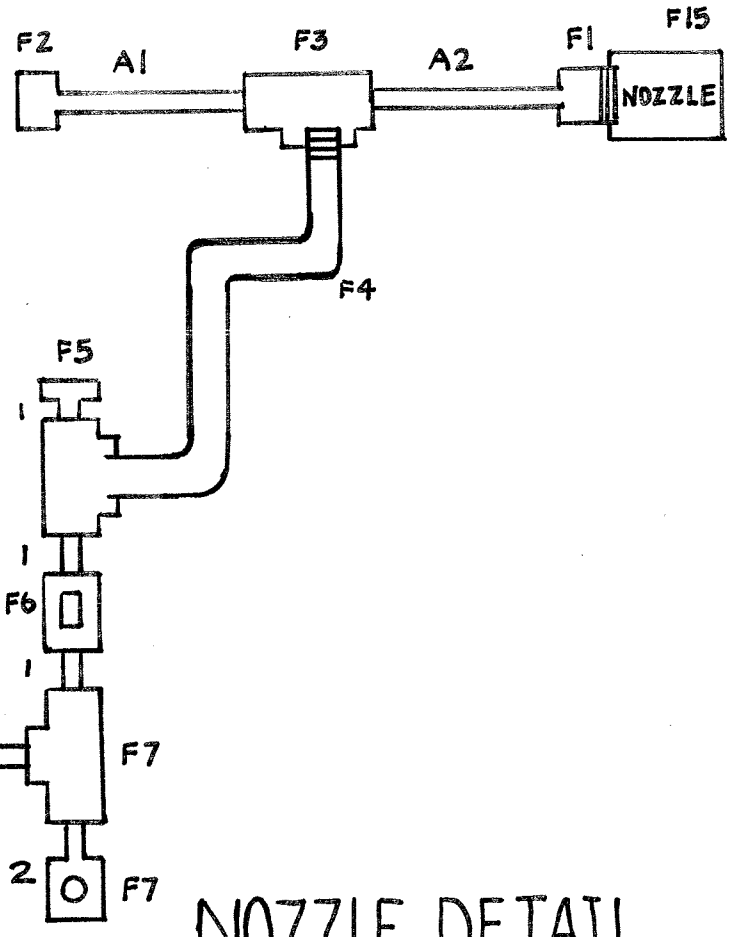
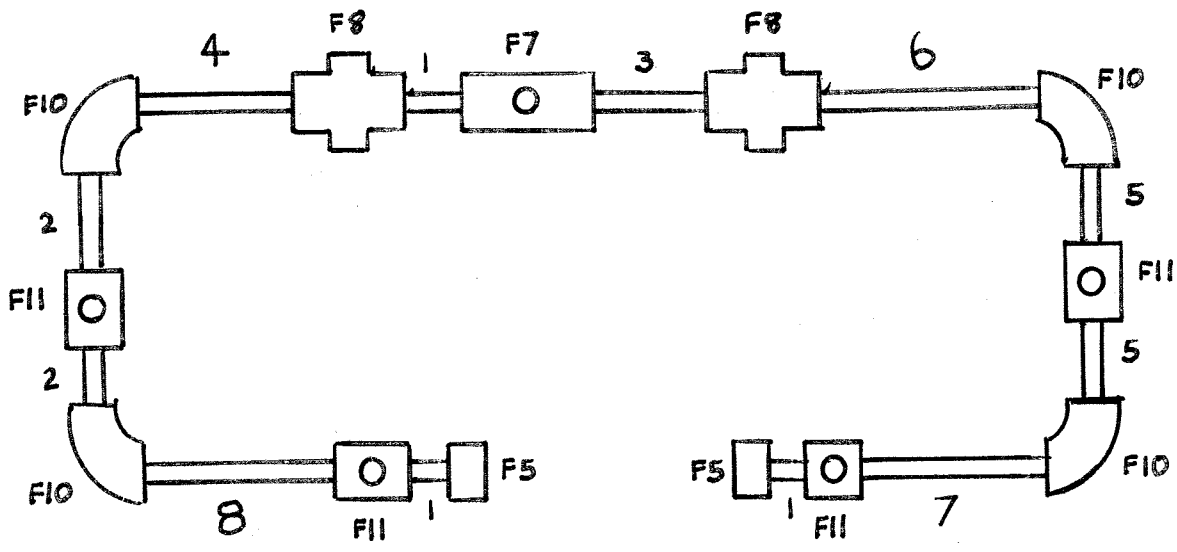
Clear Lake is a natural eutrophic lake. It produces over 130 different species of algae. Periodically nuisance blue green algal blooms occur, that can form scums along the shoreline. When these die they can create odors and associated nuisance conditions.

One method of controlling these conditions is the use of pumped water to break up the forming mats. Spraying water over algae mats has the following benefits:

- Spraying water over the surface of algae mats helps break up the mats, allowing them to sink.
- By keeping the algae wet, it can be kept alive. Dead algae decay and create noxious odors.
- Spraying water over dead algae reduces noxious odors.
- Spraying lake water ensures some circulation and aeration of water, reducing the chances of the water becoming anaerobic (no dissolved oxygen) and releasing noxious odors.

It is best to start spraying when algae blooms start and before scums form, as it is best to keep the algae alive. We recommend the water source be the lake, as the use of potable water from public or private water systems is expensive and wastes a valuable resource.

Attached is a materials list and drawings of how to construct a system that can aid the landowner in this task.

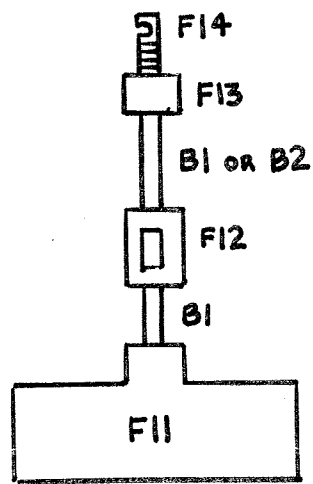


HONDA WH20X  
OR  
EQUAL

High pressure, 2 in. pump  
134 gal/min capacity  
61 psi maximum

# NOZZLE DETAIL

NO SCALE



# SPRAYER DETAIL

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NO SCALE

**MATERIALS LIST FOR  
ALGAE SPRAY PUMP**

**Part No.**

1 - 20' X 2" SCHEDULE 40 PVC

1 - 2' X 1 1/2" SCHEDULE 40 PVC

1 - 3' X 3/4" SCHEDULE 40 PVC

F1 1 - 1 1/2" MALE PIPE THREAD ADAPTOR  
(SLIP TO THREAD)

F2 1 - 1 1/2" CAP (SLIP)

F3 1 - 1 1/2" TEE-THREAD-SLIP-SLIP

F4 1 - 2' X 1 1/2" X 12" SWING JOINT ASSEMBLY

F5 3 - 2" CAPS (SLIP)

F6 1 - 2" BALL VALVE (SLIP)

F7 2 - 2" TEES (SLIP)

F8 2 - 2" UNIONS (SLIP)

F9 1 - 2" FEMALE (THREAD TO SLIP) ADAPTOR

F10 4 - 2" ELLS (SLIP)

F11 4 - 2" X 3/4" TEES (SLIP)

F12 4 - 3/4" BALL VALVES (SLIP)

F13 4 - 3/4" SLIP TO PIPE ADAPTOR (male)

F14 4 - EVAPCO SPRAYERS (2AAA)  
(Conservation Mechanical Systems Inc.)  
(925)969-9100

F15 1 - 1 1/2" VARIABLE STREAM NOZZLE

1 - 4 OZ. RED HOT GLUE

1 - ROLL TEFLON TAPE (1/2")

1 - 10" X 2" FLEXIBLE PVC

**ALGAE SPRAYER PIPE LENGTHS**

**(2" PIPE)**

Part No.

1	7 - 3" NIPPLE
2	1 - 7 3/4" NIPPLE
3	1 - 10 1/2" NIPPLE
4	1 - 2' X 8 1/2" NIPPLE
5	4 - 6" NIPPLE
6	1 - 2' X 3 1/2" NIPPLE
7	1 - 1 X 10" NIPPLE
8	1 - 2' X 4 1/2" NIPPLE

**(1 1/2" PIPE)**

A1	1 - 1' X 8" NIPPLE
A2	1 - 4" NIPPLE

**(3/4" PIPE)**

B1	6 - 4" NIPPLE
B2	2 - 5" NIPPLE

## HONDA WH 20 X WATER PUMP

### OPERATION

1. Use only 87 Octane fuel or higher for fuel.  
Do not mix oil in gas.
2. Check oil in motor daily.  
Use only SAE 10-30 Motor oil.
3. Check Air Cleaner each time pump is used.
4. Prime pump with one-half gallon of water(approx.)  
prior to starting motor.
5. Clean pump and motor after use