Attachment E – Notice of Intent

WATER QUALITY ORDER NO. 2013-0002-DWQ
GENERAL PERMIT NO. CAG990005

STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR RESIDUAL AQUATIC PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES FROM ALGAE AND AQUATIC WEED CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item

☑ A. New Applicator

☐ B. Change of Information: WDID # _____

☐ C. Change of ownership or responsibility: WDID# _____

II. DISCHARGER INFORMATION

A. Name Moraga Country Club HOA

B. Mailing Address 1600 St. Andrews Drive

C. City Moraga

D. County Contra Costa

E. State California

F. Zip Code 94556

G. Contact Person Luis Ballesteros

H. Email address Luis@moragacc.com

I. Title Director of Agronomy

J. Phone 925-766-9123

III. BILLING ADDRESS (Enter Information *only* if different from Section II above)

A. Name _____

B. Mailing Address _____

C. City _____

D. County _____

E. State _____

F. Zip Code _____

G. Email address _____

H. Title _____

I. Phone _____

IV. RECEIVING WATER INFORMATION

A. Algaecide and aquatic herbicides are used to treat (check all that apply):

☐ 1. Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.

Name of the conveyance system: _____

☐ 2. Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.

Owner's name: _____

Name of the conveyance system: _____

☑ 3. Directly to river, lake, creek, stream, bay, ocean, etc.

Name of water body: Moraga Creek to the San Francisco Bay

B. Regional Water Quality Control Board(s) where application areas are located (REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 2

(List all regions where algaecide and aquatic herbicide application is proposed.)

V. ALGAECIDE AND AQUATIC HERBICIDE APPLICATION INFORMATION

A. Target Organisms:
Eurasian Water Milfoil, Sago Pondweed, American Pondweed, Bazilian Elodea, Curley-Leaf Pondweed, Coontail, Mosquito Fern, Duckweed, Cattails,Primrose, Bullrush, Filamentous and planktonic algae

B. Algaecide and Aquatic Herbicide Used: List Name and Active Ingredients
Reward (Diquat Dibromide), Greenclean Liquid (Peroxyacetic Acid), Fluridone, Clearcast (Imazamox), Cutrine Plus (Copper), Aquathol K (Endothall)

C. Period of Application:

Start Date 5/6/2026 End Date Life of Permit

D. Types of Adjuvants Used:
Methylated Seed Oil

VI. AQUATIC PESTICIDE APPLICATION PLAN

A. Has an Aquatic Pesticide Application Plan been prepared and is the applicator familiar with its contents?

☑ Yes ☐ No

If not, when will it be prepared? _____

VII. NOTIFICATION

Have potentially affected public and governmental agencies been notified?

☑ Yes ☐ No

VIII. FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

☐ Yes ☑ No ☐ NA

IX. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the Order, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: ERIC JACOBSEN

B. Signature: Eric Jacobsen Date: 5/13/26

C. Title: General Manager / COO

XI. FOR STATE WATER BOARD STAFF USE ONLY

WDID: Date NOI Received: Date NOI Processed:

Case Handler's Initial: Fee Amount Received: $ Check#: _____

☐ Lyris List Notification of Posting of APAP Date: Confirmation Sent

MORAGA
COUNTRY CLUB

Moraga Country Club HOA

Aquatic Pesticide Application Plan (APAP)

FOR THE STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR RESIDUAL AQUATIC PESTICIDE DISCHARGES TO WATER OF THE UNITED STATES FROM ALGAE AND AQUATIC WEED CONTROL APPLICATIONS TO MEET THE AQUATIC VEGETATION MANAGEMENT REQUIREMENTS
STATEWIDE NPDES PERMIT NO. 2013-0002-DWQ
GENERAL PERMIT NO. CAG990005

Prepared For:
Moraga Country Club HOA
1600 St Andres Dr
Moraga, CA 94556

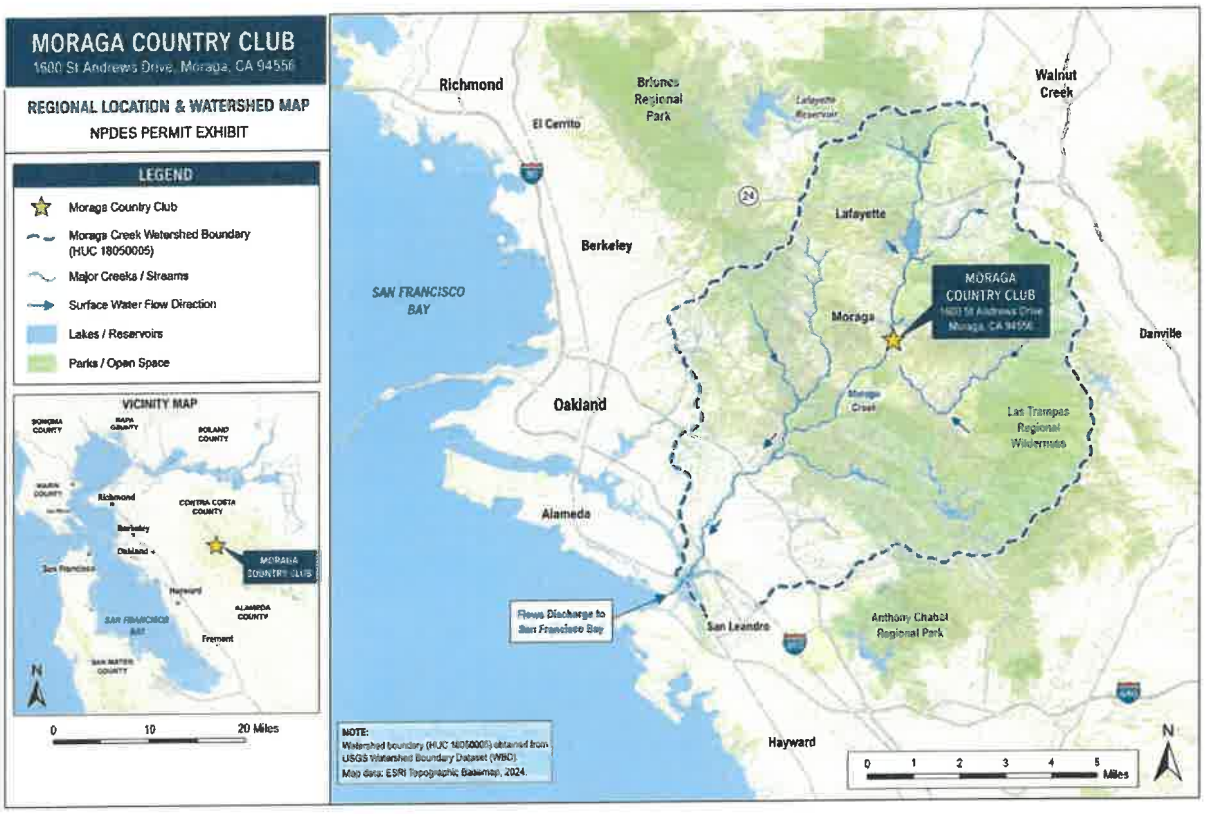
Prepared By:
Indermill Aquatics LLC
110 South Fork Way
Folsom, CA 95630

Submitted To:
State Water Resources Control Board
Division of Water Quality
1001 I Street, 15th floor
Sacramento, CA 95814

Table of Contents

Description of the System

Moraga Country Club HOA System REGION 2:



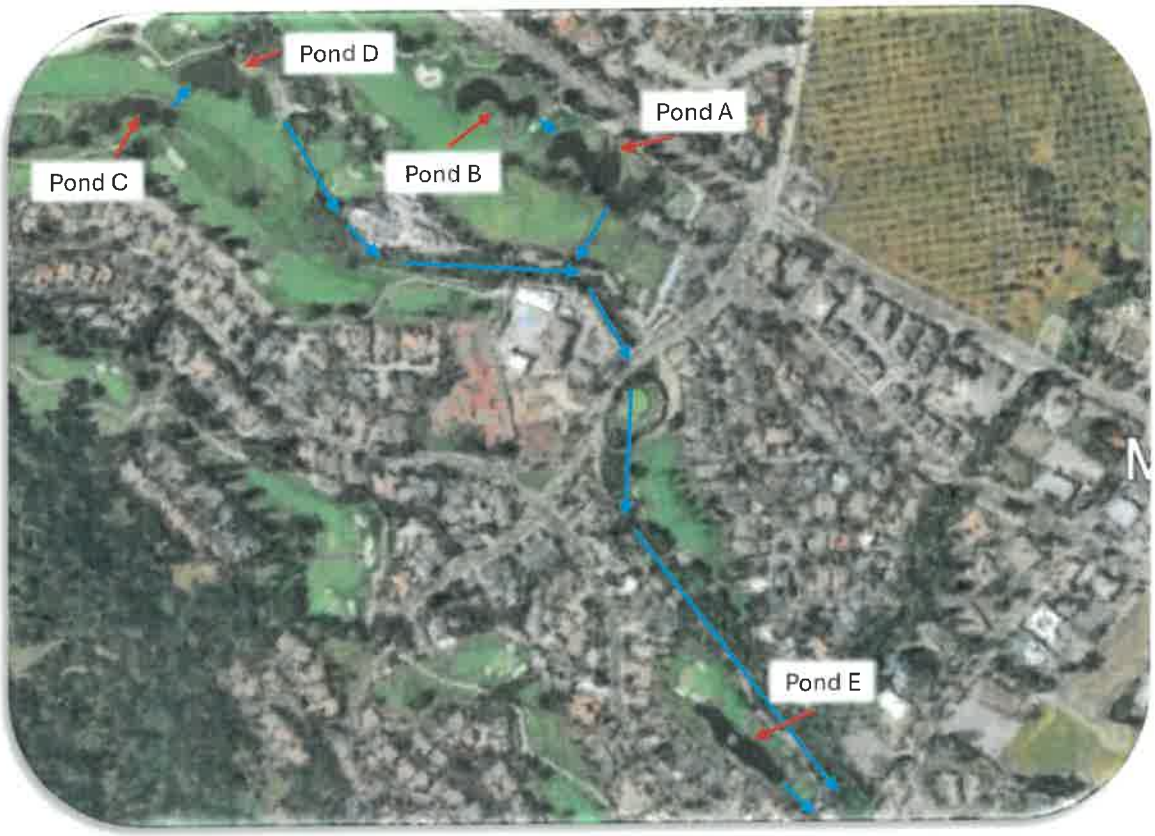
Moraga Country Club HOA is located in the town of Moraga, within Contra Costa County in the East Bay region of the San Francisco Bay Area. Moraga Country Club HOA is a community including 521 private residences that sits in the Moraga Valley, surrounded by rolling hills and residential development, between the neighboring communities of Orinda and Lafayette. The site is integrated into natural terrain consisting of hills, seasonal drainages, and small creeks that run through and adjacent to the golf course and community. These local drainage features ultimately connect to Moraga Creek, the primary surface watercourse in the area. Moraga Country Club HOA maintains an interconnected system of waterways consisting of multiple lakes, ponds, and streams distributed throughout the community and golf course. These water bodies provide several beneficial uses, including aquatic habitat for fish and waterfowl, recreational opportunities such as fishing, and aesthetic value for the surrounding residential properties.

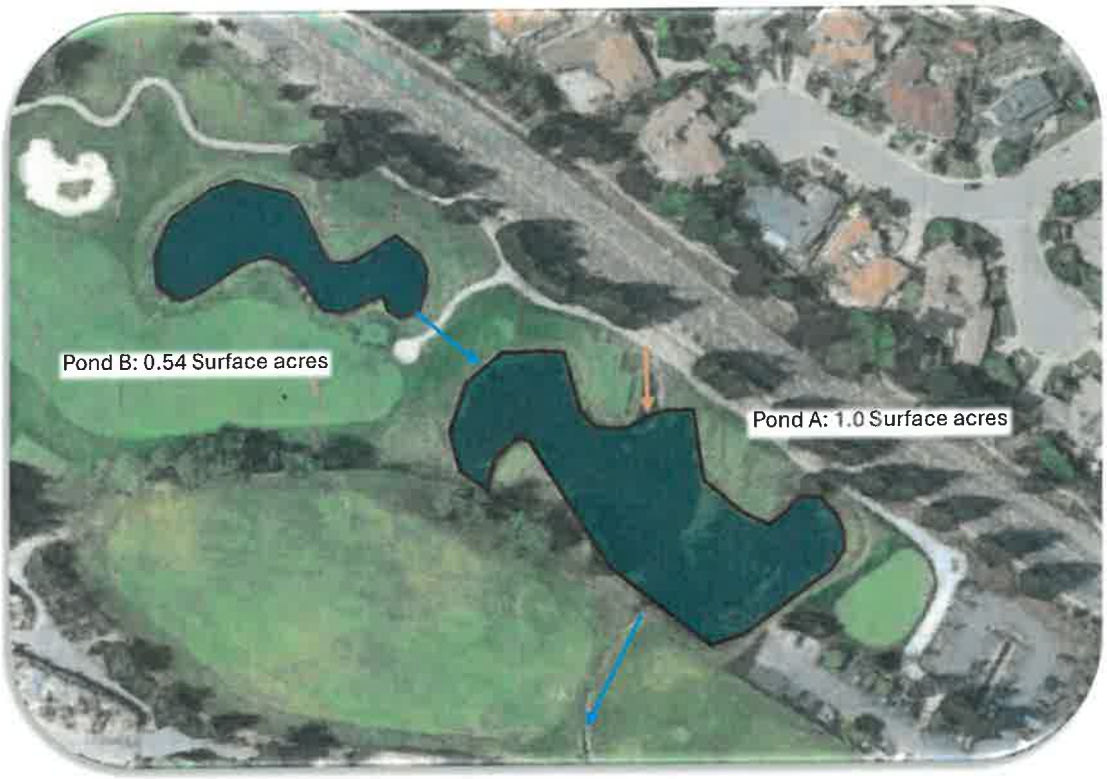
Moraga Country Club is located at 1600 St. Andrews Drive in the Town of Moraga, within Contra Costa County in the East Bay region of San Francisco Bay Area. The site is situated within the Moraga Creek watershed, a tributary of the San Leandro Creek Watershed. Surface water runoff from the property, including irrigation return flows and stormwater, drains via on-site conveyances and natural channels to Moraga Creek, which flows to the Upper San Leandro Reservoir and continues downstream through San Leandro Creek, ultimately discharging to San Francisco Bay. The property consists of a golf course and residential community with landscaped areas, fairways, and maintained water features, and is characterized by typical urban and managed landscape runoff conditions within a tributary watershed to San Francisco Bay.

Description of treatment area

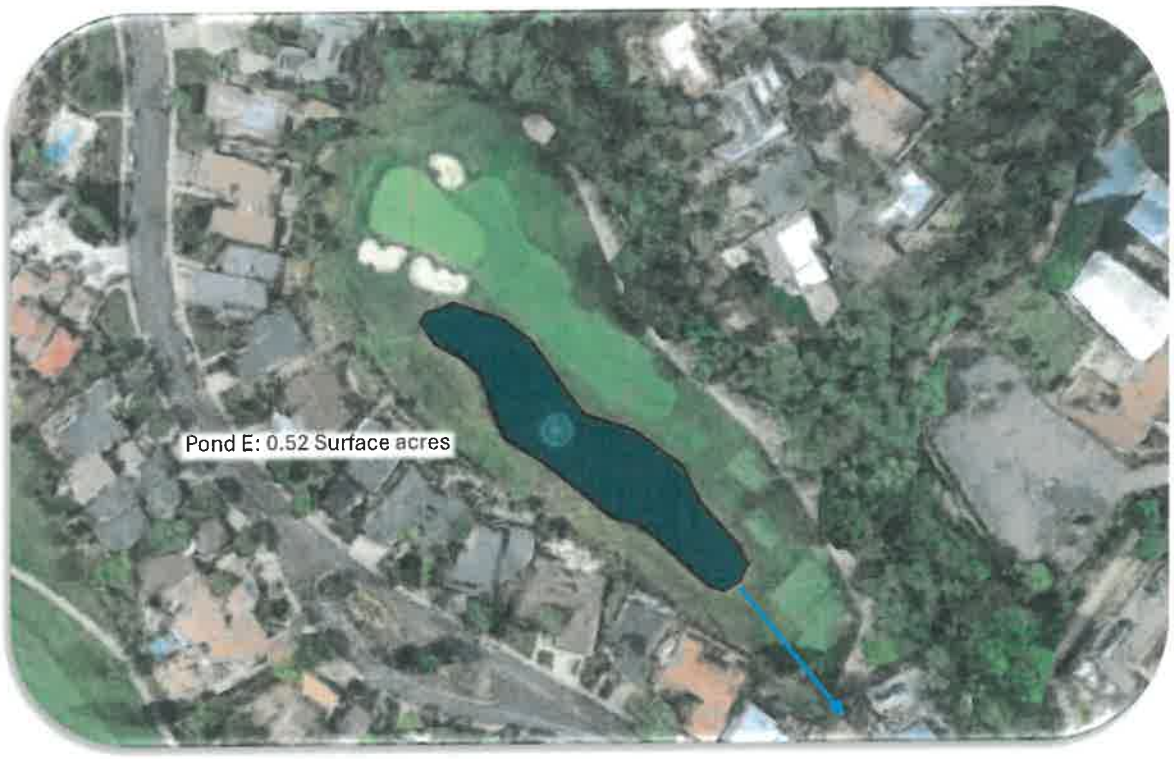
Moraga Country Club HOA

The aquatic herbicide treatment area at Moraga Country Club consists of an interconnected system of managed water bodies distributed throughout the golf course and residential community, including lakes, ponds, waterways, and connecting channels/streams. Treatment areas include the water surface, subsurface water column, and targeted shoreline zones where aquatic vegetation and algae are present. These areas are hydraulically connected and receive inflows from irrigation return, stormwater runoff, and localized drainage, with outflows discharging to Moraga Creek. Applications are conducted within defined treatment zones based on vegetation type and density, water depth, and flow conditions, and are limited to accessible open water and littoral areas where nuisance aquatic plant growth occurs.




Pond B: 0.54 Surface acres
Pond A: 1.0 Surface acres


Moraga Creek
Pond D: 0.64 Surface acres
Pond C: 0.44 Surface acres



This facility contains a multi-pond water management system consisting of five primary ponds (Ponds A–E) that function collectively for stormwater conveyance, irrigation storage, and controlled discharge to Moraga Creek. The system includes both interconnected surface water features and isolated basins designed to manage inflows from creek sources, stormwater runoff, and internal redistribution for irrigation use.

Ponds A and B – Primary Stormwater and Conveyance Basin:

Pond A and Pond B operate as an interconnected hydrologic unit. Pond A receives direct inflow from Pond B and serves as a secondary collection basin. Additional hydrologic inputs to Pond A include stormwater runoff generated from the surrounding watershed and a small perennial/intermittent creek that flows beneath Moraga Boulevard. This combined system functions as an initial stormwater capture and attenuation area prior to downstream conveyance.

Ponds C and D – Irrigation Storage and Distribution System:

Pond C functions as an upstream irrigation supply reservoir and is fed by a small creek entering the site from the west. Water from Pond C discharges through a manually controlled weir into Pond D. Pond D serves as the primary irrigation storage and pumping basin for the site. A pump system located within Pond D supplies irrigation water to the associated distribution network. Excess water not utilized for irrigation demand is

discharged from Pond D into Moraga Creek through a spillway located on the east end of the lake.

Pond E – Isolated Stormwater Basin:

Pond E operates as a independent stormwater retention basin. It does not connect to Ponds A–D under normal operating conditions. When water levels in Pond E exceed design capacity, overflow is discharged via a storm drain system that ultimately conveys flow to Moraga Creek.

Receiving Waters:

The primary receiving water for controlled discharges from the system is Moraga Creek. The pond system is designed to regulate stormwater inputs, manage irrigation supply demands, and provide controlled overflow pathways to minimize uncontrolled surface runoff.

Aquatics Weeds and Algae That Are Being Controlled

Nuisance growths of submersed aquatic vegetation have impacted the beneficial uses of the system that include water storage and aesthetics. Historical methods that have been utilized for the control of aquatic vegetation include the use of Environmental Protection Agency (US-EPA) Herbicides and Algaecides, as well as manual removal. Nuisance growths of aquatic vegetation within Moraga Country Club HOA have caused varying levels of negative impacts on the beneficial uses of these water bodies for the general population as well as Moraga Country Club HOA maintenance personnel in recent years. This Aquatic Pesticide Application Plan (APAP) was developed by Indermill Aquatics to ensure that nuisance growths of aquatic vegetation do not impact the beneficial uses of these water bodies in the future years. IA's staff has performed various site inspections of Moraga Country Club HOA to review the various issues associated with nuisance growths of aquatic vegetation. These site inspections provided the information contained herein.

A review of the Aquatic Vegetation impacts to Moraga Country Club HOA is presented below. The lake is impacted by nuisance algae growth during the warmer months. Although this lake has specific algae and vegetation that have been identified below, we want to be comprehensive in specifying that there are a number of varieties and species of algae, submersed vegetation, floating, and terrestrial vegetation that can vary from year-to-year.

Problem Identification (Species Present)

- Attached, Filamentous and Planktonic Algae
- Duckweed (Lemnoideae)
- Mosquito Fern (Azolla)
- American Pondweed (PotamogetonnodosusPoir)
- Curly-Leaf Pondweed (Potamogetoncrispus)
- Sego Pondweed (Stuckeniapectinata)
- Water milfoil (Myriophyllum spicatum)

Activities Being Impacted

At Moraga Country Club, excessive algae and aquatic weed growth can adversely affect several key activities and beneficial uses associated with the community's interconnected pond and lake system. Recreational uses, including fishing and general enjoyment of the water features, may be limited by dense vegetation, surface mats, and reduced water

clarity. Aesthetic value for surrounding residential properties is also diminished due to discoloration, odors, and visible biomass accumulation.

Operationally, algae and aquatic weeds can interfere with irrigation infrastructure by clogging intake screens, pumps, and conveyance lines, reducing system efficiency and increasing maintenance requirements. Dense growth may also impede water circulation and flow between connected water bodies, contributing to stagnation, reduced dissolved oxygen levels, and potential impacts to fish and waterfowl habitat.

Additionally, unmanaged vegetation can restrict access for routine maintenance and monitoring activities and may contribute to sediment accumulation and nutrient cycling issues that further degrade water quality. Overall, these conditions can impair the functional, ecological, and aesthetic performance of the water system. Negative impacts to the aquatic ecosystem will continue or increase if the aquatic weeds and algae are left uncontrolled. Aquatic herbicide applications will be limited to the areas of the lake systems where aquatic vegetation growths impact the beneficial uses of the systems. The planktonic algae can impact aesthetics, and has potential health hazards for human and animal contact with the lake.

Algaecides and Aquatic Herbicides to be used, Their Degradation Byproducts, Application Methods, and the Adjuvants and Surfactants Used

ACTIVE INGREDIENTS	DEGRADATION BYPRODUCTS	APPLICATION METHOD
AQUATIC HERBICIDES		
Fluridone	n-methyl formamide (NMF) 3-trifluoromthyl benzoic acid	Backpack sprayer
Endothall	Glutamic Acid	Backpack sprayer
Diquat Dibromide	Diquat binds with organic matter in the sediment indefinitely. It does not degrade and will accumulate in sediments	Backpack sprayer
Glyphosate	Aminomethylphosphonic acid, carbon dioxide	Backpack sprayer
Tryclopyr	TCP (3,5,6- trichloro-2- pyridinol) and TMP (3,5,6-trichloro-2-methoxypridine)	Backpack sprayer
Imazamox	nicotinic acid and di- and tricarboxylic acids	Backpack sprayer
Imazapyr	Pyridine hydroxyl-dicarboxylic acid and nicotinic acid	Backpack sprayer
Penoxsulam	BSTCA (half-life 67-770 days), 2-amino-TCA, 5-OH-penoxsulam, SFA, sulfonamide, and 5,8-di-OH	Backpack sprayer
Flumioxasm	APF (6-amino7fluoro-4-(2-propynyl)-1,4,- benzoxazin3(2H)one) and THPA (3,4,5,6-tetrahydrophthalic acid	Backpack sprayer
AQUATIC ALGAECIDES		
Sodium Carbonate Peroxyhydrate	Breaks down to hydrogen peroxide and sodium carbonate in water. Hydrogen peroxide decomposes into water and oxygen	Spreader
Hydrogen Dioxide	Water and oxygen	Backpack sprayer
Peroxyacetic Acid	Water, oxygen and carbon dioxide	Backpack sprayer
Copper Formulations	Does not break down	Spreader, Backpack sprayer

Factors influencing the decision to select aquatic herbicide applications

Communication with Moraga Country Club HOA as well as experience on this account reveals that these vegetation problems have been consistent over the last few years.

Over time these aquatic weeds can drastically change the physical and chemical characteristics of any waterway. Failure to implement control measures will allow the infestations of these plants to decrease water quality, provide habitat for mosquito larvae, clog the waterways, shading out of important organisms, reduce biodiversity, and increase the threat of flooding and drainage problems, all of which decrease the recreational and aesthetic value of the system. Generally speaking, the association's primary goal is to maintain their system to provide adequate flood control protection, as well as aesthetic and recreational value. Treatments for the control of aquatic vegetation using contact herbicides will be implemented each year when plant densities begin to reach nuisance levels. Treatments for the control of aquatic vegetation using a systemic aquatic herbicide will be implemented each year when the plants begin to grow. Treatments for the control of algae will be implemented when, or just prior to densities reaching nuisance levels based on visual observations.

Description of Gates and Control Structures

The ponds at Moraga Country Club are equipped with a series of water control structures designed to regulate water levels, manage flow between interconnected water bodies, and support stormwater conveyance. These structures typically include outlet control risers, weirs, and gated pipes or valves that allow for adjustment of discharge rates and retention times within each pond.

Control gates and valves are used to isolate specific ponds or segments of the system for maintenance activities, including aquatic vegetation management and sediment control, and to regulate flows during irrigation operations or storm events. Overflow structures, such as spillways or standpipes, provide controlled release during high water conditions, directing excess flows downstream toward Moraga Creek.

These control features are integral to maintaining hydraulic connectivity across the system while preventing uncontrolled discharge, reducing erosion potential, and supporting compliance with stormwater management and NPDES permit requirements.

Short-Term or Seasonal State Implementation Policy Exemption

If the Discharger has been granted a short-term or seasonal exception under State Water Board Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays,* and Estuaries of California (Policy) section 5.3 from meeting acrolein and copper receiving water limitations, provide the beginning and ending dates of the exception period, and justification for the needed time for the exception. If algaecide and aquatic herbicide applications occur outside of the exception period, describe plans to ensure that receiving water criteria are not exceeded because the Dischargers must comply with the acrolein and copper receiving water limitations for all applications that occur outside of the exception period:

No short-term or seasonal exception has been applied for or granted.

Description of Monitoring and Reporting Program

Monitoring and sampling shall be performed in accordance with the guidelines set forth in Attachment C of Water Quality Order 2004-00090DWQ and as outlined below.
Each monitoring event will follow the parameters in Table 1.

TABLE 1: MONITORING PARAMETERS

Sample Type	Constituent / Parameter	Units	Sample Method	Minimum Sampling Frequency	Sample Type Requirement	Required Analytical Test Method
Visual	1. Monitoring area description (pond, lake, open waterway, channel, etc.) 2. Appearance of waterway (sheen, color, clarity, etc.) 3. Weather conditions (fog, rain, wind, etc.)	Not applicable	Visual Observation	1	Background, Event, and Post-event Monitoring	Not applicable
Physical	1. Temperature[2] 2. pH[3] 3. Turbidity[3] 4. Electrical Conductivity[3] @ 25°C	°F Number NTU µmhos/cm	Grab[4]	5	Background, Event, and Post-event Monitoring	6
Chemical	1. Active Ingredient[7] 2. Nonylphenol[8] 3. Hardness (if copper is monitored) 4. Dissolved Oxygen[2]	µg/L µg/L mg/L mg/L	Grab[4]	5	Background, Event, and Post-event Monitoring	6

Footnotes

1. All applications at all sites.
2. Field testing.
3. Field or laboratory testing.
4. Samples shall be collected at three feet below the surface of the water body or at mid water column depth if the depth is less than three feet.
5. Collect samples from a minimum of six application evens for each active ingredient in each environmental setting (flowing water and non-flowing water) per year, except glyphosate. If there are less than six application events in a year, collect samples during each application even for each active ingredient in each environmental setting (flowing water and non-flowing water). If the results from six consecutive sampling events show concentrations that are less than the receiving water limitations/trigger for an active ingredient in an environmental setting, sampling shall be reduced to one application even per year for that active ingredient in that environmental setting. If the yearly sampling even shows exceedance of the receiving water

limitation/trigger for an active ingredient in an environmental setting, then sampling shall return to six application evens for that active ingredient in each environmental setting. For glyphosate, collect samples from one application even from each environmental setting (flowing water and non-flowing water) per year.

6. Pollutants shall be analyzed using the analytical methods described in **40 C.F.R. Part 136**
7. 2,4-D, acrolein, dissolved copper, diquat, endothall, fluridone, glyphosate, imazamox, imazapyr, penoxsulam, and triclopyr.
8. It is required only when a surfactant is used

Sampling Procedures and Contamination Prevention

When taking the sample, the cap will be left on the bottle until it is at the depth appropriate for the type of pesticide and water body. A grab sampler extension will be used if necessary. If sampling depth is beyond reach of the grab sampler, the sample will be taken as deep as possible. Clean disposable nitrile gloves will be worn during collection. After filling laboratory supplied containers they will be returned to secondary containment (i.e. cooler or re-sealable bags). Samples will be delivered directly to the laboratory where appropriate Chain of Custody (COC) forms will be filled out.

Moraga Country Club HOA

Sampling per the above requirements will be performed at two sites within the Lake. Since Moraga Country Club HOA is operated in static condition, the monitoring locations will be selected to represent the two types of treatments performed. The monitoring locations for entire lake or lagoon treatments will be selected from a location close to the lake outlet on the north end of the lake. The background and post event monitoring locations for spot lake treatments will be within the treatment areas. The event monitoring locations for spot lake treatments will be collected immediately outside of the treatment areas. Sampling will be performed immediately prior to, during, and post application as described in Attachment C. Reporting will occur annually by March 1 and include field and lab data as required by Attachment C. Indermill Aquatics uses industry standard sampling procedures. Only trained technicians will retrieve samples from this project. Sample bottles will be pre-labeled to ensure accuracy and location. Samples will be transported and stored in a cooled environment until analysis is performed. Chain of custody forms will accompany all samples. All data will be reviewed on an ongoing basis during the performance of the project.

Best Management Practices (BMP)

The subsequent application procedures and BMPs shall be followed:

- The herbicide solutions shall not be allowed to mist, drip, drift, or splash onto non-targets.
- When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) that are likely to drift.
- Avoid applying at excessive speed or pressure.
- Monitor droplet sizes especially in extremely dry, somewhat windy, or humid conditions.
- Application should take place with wind speeds between 2 and 10 miles per hour (mph). With winds below 2 mph, application should be avoided due to variable wind direction and high inversion potential. Winds above 10 mph increase the chances for wind drifts, gusts, and application of herbicides to non-targets.
- Any water use restrictions will be addressed with the Moraga Country Club HOA.
- Fish are commonly seen throughout the lake. Fish can be harmed during the application of aquatic herbicides/algaecides, which can reduce the amount of oxygen in the water. Only the minimum amount of aquatic herbicides and algaecides will be applied and only to the impacted area.
- Staff will have regular safety meetings prior to working with chemicals. During the meeting safety precautions will be reviewed as per the manufactures product label and SDS.Education on possible adverse effects from algaecide and aquatic herbicide applications will be covered during chemical safety training. Licensed applicators receive yearly and project specific training on all potential herbicides in use. The training consists of evaluation of the current labels and material safety data sheets which delineate the possible adverse effects that can occur from applications with each specific herbicide or algaecide. In addition PCA's, QAL's, and QAC's are required to complete continued education hours every two years to be licensed with the DPR. The approved continued education courses and seminars educate PCA's, QAL's, and QAC's in a wide variety of topics including pesticide laws, regulations, and pest control methods.

Examination of Possible Alternatives to Algaecides and Aquatic Herbicides

Other BMPs to consider:

Weekly Lake Inspections – Observing overall site conditions within Moraga Country Club HOA, such as changes in water color or clarity, odors, unusual aquatic life activity, excessive floating debris or algae, and noting weather changes and the impacts of these on lake conditions helps in determining overall lake health. These observations when compared side by side with water quality testing results can help determine patterns or cycles that the lake experiences, thus allowing further evaluation of current practices and future practices.

Ongoing Lake Maintenance – Regular debris removal program. The removal of trash, algae, and organic materials from the lake helps reduce nutrient loads that must be processed by the lake, ultimately reducing the amount of pesticides necessary to combat algae.

Aeration - Introducing oxygen to the water column is beneficial to lakes. Dissolved oxygen increases nitrogen removal rates. Additionally it encourages aerobic decomposition of organic materials, which leads to less sediment accumulation than anaerobic decomposition. This in turn reduces the release of gases and objectionable odors. Aeration can be achieved through diffusers or fountains placed throughout the lake to agitate surface water, eliminate stratification and increase water movement in otherwise static coves.

Applying a decision matrix concept to the choice of the most appropriate pest management formulation from the evaluated alternatives to algaecide and aquatic herbicide application

A combination of non-chemical alternatives for algae and aquatic weed treatment will be evaluated and implemented before the decision to use chemical treatments. At Moraga Country Club HOA we have four fountains in place both on the south and north ends of the lake. There are also five vane compressor aerators in use in each of the coves where water movement might be slowed and the water could become stagnant. Each compressor has at least four diffuser heads equidistant around the cove to promote oxygenation and destratification throughout the cove. These tools all provide water movement, agitation, destratification and oxygenation to promote a healthy body of water. This is the first line of defense .These measures incorporated into the weekly inspections and ongoing lake maintenance reduce the need for chemical treatments. During the lake maintenance inspections if it is found that the nutrient load is increasing in the water body, non chemical treatments can then be performed. Treatments such as Phoslock can be broadcast throughout the system to control phosphorus in the water, thus reducing one of the main food sources for algae. If the evaluated alternatives fail to produce desired resultsThe decision to implement aquatic vegetation control treatments is based on the plants growth stage and its potential to negatively impact the positive uses of a determined area. When it comes to deciding what the most appropriate formulation is, Indermill Aquatics will rely on a PCA to determine the formulation and write a recommendation after evaluating the specific species of pest, water quality, which formulation has the least impact on the surrounding environment, non-target organisms, and human health and assessment of product labels and material safety data sheets.