2016 Bottom Barrier Monitoring Report

Prepared Pursuant to
California Regional Water Quality Control Board
Lahontan Region Board Order No. R6T-2014-0059

Tahoe Keys
PROPERTY OWNERS ASSOCIATION
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530-542-6444 tahoekeyspoa.com

January 31, 2017
2016 Bottom Barrier Monitoring Report

Prepared for the Tahoe Keys Property Owners Association

Prepared by

Gregory J Hoover

TKPOA AIS Management Coordinator/Water Quality Manager
Table of Contents
A. Waste Discharge Requirements............................................................................................................ 1
B. 2016 Implementation .......................................................................................................................... 1
C. Summary of Findings.......................................................................................................................... 1
D. Summary of Bottom Barrier Performance.......................................................................................... 2
   I. Installation of Bottom Barriers ........................................................................................................ 2
   II. Harvesting Near Bottom Barriers ................................................................................................. 2
   III. Fragments from Harvesting .......................................................................................................... 3
   IV. Siltation on Top of Bottom Barriers .............................................................................................. 3
   V. Identification and Markings ........................................................................................................... 3
E. Monitoring Data.................................................................................................................................... 3
F. 2017 Implementation and Recommendations ................................................................................... 3
G. List of Preparers ................................................................................................................................... 4

Table of Figures
Figure 1. Location of 2016 Bottom Barriers........................................................................................... 1

Attachments
Attachment A – Homeowner Program Evaluation Statements
Attachment B – Bottom Barriers Identification Sign
A. Waste Discharge Requirements


B. 2016 Implementation

The Tahoe Keys Property Owners Association (TKPOA) took into account the 2016 proposed corrective measures to the bottom barrier program, including heavier weighting material for the barriers, use of professional divers for installation, and updating the permit, Form 19. In addition, TKPOA received an increased number of bottom barriers from the Tahoe Resource Conservation District (TRCD) to equip eighteen (18) homeowners with barriers. The intent was to use more barriers at different locations among the waterways to see the different results due to location.

C. Summary of Findings

In 2016, the Tahoe Keys Property Owners Association (TKPOA) conducted another season of its bottom barrier program for homeowners. Barriers were supplied by the Tahoe Resource Conservation District (TRCD) free of charge for eighteen homeowners at the locations shown on Figure 1. As part of the process, the homeowners were required to fill out an application and permit for use of the barriers. Barriers were installed by the homeowners in June 2016 and removed no later than October 2016. The barriers were monitored throughout the season by the Water Quality (WQ) and ACD Staffs.

Figure 1. Location of 2016 Bottom Barriers
After all the bottom barriers were removed the treated areas were inspected by the homeowner for plant growth. The barriers were effective in preventing the growth of aquatic weeds directly underneath them but it was noted that plants were growing near the edges of the barriers and on top of the barriers in the sediment that had accumulated there. It was also noted that, while the bottom barriers were effective, they only covered between 100 and 300 square feet (depending on the amount and size that each property received) and the rest of the cove was densely infested with aquatic plants.

Each homeowner that participated in the program was given an end of the season report that consisted of these questions:
1. Name / address / phone number
2. Density of plants during installation
3. Date installed / duration of installation / date removed
4. Effectiveness of the installation of barriers for the season
   a. Are any live weeds observed after removal?
   b. Was there any accumulation of dead/decaying plant material observed?
   c. Were any odors of decaying plant material detected during the deployment?
   d. Was the water clouded (turbid) upon removal?
   e. Were and how was the barrier cleaned upon removal and where is it stored?
   f. Were the barriers cost effective to the homeowner?
5. Were there any incidents reported during the deployment, such as: Loose barriers, watercraft or swimmer entanglements, chemical spills, etc?
6. Additional comments or concerns

See Appendix A for each of the homeowner’s End of the Season Report. Note that six homeowners did not fill out the required paperwork. ACD contacted and requested this information.

D. Summary of Bottom Barrier Performance

Several obstacles hindered the success of the 2016 Bottom Barrier Program. Issues included difficulties with installing the barriers, inability to harvest aquatic weeds near the barriers requiring cooperation with nearby homeowners, fragments from harvesting operations, and siltation on top of the barriers.

I. Installation of Bottom Barriers
Homeowners were responsible for the installation of barriers. Some installed it themselves while others outsourced it to diving companies. The level of effectiveness that the barriers had over the season was largely depended on how they were initially installed.

II. Harvesting Near Bottom Barriers
Harvesting is the primary aquatic plant control method used in the Tahoe Keys. Large harvesters travel around the lagoons and cut the plants to a height that allows boat access. Areas around the bottom barriers could not be harvested due to the risk of dislodging or damaging the barriers. Due to this, aquatic plant growth around the barriers was substantial and unchecked which can limit boat access. Docks belonging to other homeowners that were next to the bottom barriers could not be serviced which meant that cooperation with the adjacent homeowners was needed.
III. **Fragments from Harvesting**
While harvesting near the bottom barriers was prohibited, there was still harvesting taking place in the same cove where barriers were installed. The harvesting created fragments that settled on top of the barriers and began to root in the sediment which had accumulated on the surface of the barriers.

IV. **Siltation on Top of Bottom Barriers**
Over the four-month period that the barriers were in place, a layer of silt accumulated on top of them. This silt most likely came from boat traffic disturbing the layer of fine sediment on the bottom of the lagoons. The layer of silt allowed new aquatic weeds to root and grow on top of the barriers. The added weight of the silt and plant growth on the top of the barriers made removal more difficult. Removal of the barriers also disturbed the lagoon bottom and created a high level of turbidity in the local vicinity, which took several hours to clear.

V. **Identification and Markings**
There were two visual markers that the homeowners were required to display to identify the Bottom Barrier area. There were two (2) laminated sheets of white paper signs that that were posted on opposite ends of the docks to identify that there were bottom barriers in the vicinity. To identify the exact location of the outline a yellow buoys were placed at the edges. Most of the signs were taped to the dock, which allowed a many of them to be blown away due to wind. At the end of the season a majority of docks and slips did not have signs that remained. Also, many of the buoys were improperly weighted down and had the same results of the signs.

E. **Monitoring Data**
The barriers were monitored throughout the season by the Water Quality (WQ) and ACD Staffs. However, the homeowners were responsible for documenting their experience with the bottom barrier program. Attachment A includes documentation from the participants in the 2016 program.

F. **2017 Implementation and Recommendations**
The TKPOA will offer the same Bottom Barrier Program for the homeowners to participate in. The homeowners will be required to fill out the permit / application through the Architectural Control Department and will be responsible for the installation, removal, cleaning, monitoring and documentation of the barriers. Upon completion of the installation, the Water Quality Department will be responsible for monitoring, ensuring the upkeep of the barriers by the homeowners and the end of season reporting for the program.

The two primary recommendations for the 2017 season are the use of better signs and buoys to ensure that areas containing bottom barriers are well marked to prevent damage and the use of barriers in a larger continuous area. Using the barriers in a larger area will help decrease the chance of rapid re-infestation by nearby populations of aquatic plants.
G. List of Preparers

The following individual prepared the text presented in this report.

<table>
<thead>
<tr>
<th>Name</th>
<th>Education</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gregory J Hoover</td>
<td>A.A Natural Science</td>
<td>Primary Author</td>
</tr>
<tr>
<td>TKPOA</td>
<td>A.A Liberal Arts: Math and Science</td>
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<td></td>
<td>Lake Tahoe Community College</td>
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Attachment A

Homeowner Program Evaluation Statements
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 1400 CHRISTIE DR
Property Code: 241083
Owner Name: ROBERT LINDNER Phone: 530-541-3147
Representative: Phone: 318-0762

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.

   I HAD PREVIOUSLY RAKED THE AREA. THE
   EXISTING PLANTS WERE SMALL 2-3"
   RANDOMLY SPACED 6 TO 12" APART

2) Date barriers were installed, and removed for the season. Installed: 6/16/16 Removed: 9/27/16

3) Duration of installation (# of days) 114

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? YES A FEW
   B. Are any accumulations of dead/decaying plant material observed? YES A FEW
   C. Were any odors of decaying plant material detected during the deployment? FISHY SMELL
   D. Was the water clouded (turbid) upon removal? YES THE BARRIER WAS
      COVERED WITH SILT WHICH CLOUDED THE WATER
   E. Where and how was the barrier cleaned upon removal and where is it stored?
      I CLEANED THE BARRIERS ON MY LAWN, I LET
      THEM DRY OVERNIGHT, SWEPT ALL THE SILT AND
      DISPOSED OF IT AND HOSED THEM DOWN. THE
      T.K.P.O.A. OWNS THE BARRIERS AND STORES THEM.
   F. Were the barriers cost effective in the owner's opinion, etc.?
      IN MY OPINION THEY ARE WORTHLESS

1
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.?  **NO**

Provide details:


6) Additional comments and/or concerns:

THE FIRST COUPLES OF WEEKS ALOT OF BUBBLES WERE PRODUCED AND THE BARRIERS HAD TO BE BURIED. RETRIEVING THE BARRIERS WAS HARD BECAUSE OF ALL THE SIT ON TOP. IT WAS DIFFICULT TO DETERMINE IF ANY POSITIVE RESULTS WERE ACHIEVED. FOR THE AMOUNT OF WORK IT TOOK IT WAS A WASTE OF TIME.


Owner Signature:  

Date: 10/5/2016
400 Christie
Write a description for your map.

Legend
📍 400 Christie Dr
_near_ Tahoe Keys, South Lake Tahoe, CA 96150

400 Christie Dr

Google Earth
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 1969 Marconi Way
Property Code: 188723280003
Owner Name: George Yun
Representative: Phone: 415 470 6576

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.
   Dense, covered entire area around dock, 3-4 feet

2) Date barriers were installed, and removed for the season. Installed: May; Removed: Oct

3) Duration of installation (# of days) 1

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? No
   B. Are any accumulations of dead/decaying plant material observed? at bottom and around barriers
   C. Were any odors of decaying plant material detected during the deployment? No
   D. Was the water clouded (turbid) upon removal? Yes
   E. Where and how was the barrier cleaned upon removal and where is it stored? With water, pick up on driveway
   F. Were the barriers cost effective in the owner’s opinion, etc? Yes
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.?

Provide details: Barriers only weighed down at each end, so became a bit loose over time.

6) Additional comments and/or concerns: Would like to buy my own barriers that allow rebar weights every 2-3 feet.

Owner Signature: [Signature] Date: 10/25/2016
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: LIGHTHOUSE SHORES
Property Code: 1
Owner Name: LORI RUNCO Phone: 415-385-5840
Representative: Phone:

CHECKLIST:
1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.

A LOT OF PLANTS ALL THE WAY TO THE TOP OF THE WATER

2) Date barriers were installed, and removed for the season. Installed: 5-13 Removed: 10-11

3) Duration of installation (# of days) 120 days <APPEND>

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? I AM NOT AT LOCATION!
   B. Are any accumulations of dead/decaying plant material observed? I AM NOT AT LOCATION
   C. Were any odors of decaying plant material detected during the deployment? SORRY - I AM NOT AT LOCATION
   D. Was the water clouded (turbid) upon removal? 

E. Where and how was the barrier cleaned upon removal and where is it stored? AT LOCATION

F. Were the barriers cost effective in the owner’s opinion, etc.? YES}

1
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc?

Provide details:

6) Additional comments and/or concerns:

Owner Signature: [Signature]

Date: 10-25-16
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 1585 Venice Drive, South Lake Tahoe
Property Code: 
Owner Name: Susan Roberts  Phone: 650-315-4941
Representative: May  Phone: 530-314-9663

CHECKLIST: 

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.

2) Date barriers were installed, and removed for the season. Installed: 10-10-16  Removed: May 14, 2016

3) Duration of installation (# of days) 149

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? YES
   B. Are any accumulations of dead/decaying plant material observed? NO

   C. Were any odors of decaying plant material detected during the deployment?

   D. Was the water clouded (turbid) upon removal? NO

   E. Where and how was the barrier cleaned upon removal and where is it stored?

   F. Were the barriers cost effective in the owner’s opinion, etc.? NO
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.?

Provide details:

__________________________________________________________________________________________________________________________________________

6) Additional comments and/or concerns:

The only thing Mayfelt was good for from the bottom barriers is that it kept under the boat clean. Map believed it was a waste of time.

__________________________________________________________________________________________________________________________________________

Owner Signature: ____________________________ Date: 10-18-16
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 1921 Kehoe Way
Property Code: 787
Owner Name: Dorantes
Representative: Max Simp

Phone: 530-224-5525

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.

2) Date barriers were installed, and removed for the season. Installed: 5/28/16, Removed: 10/10/16

3) Duration of installation (# of days) 8

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? unknown
   B. Are any accumulations of dead/decaying plant material observed? unknown

C. Were any odors of decaying plant material detected during the deployment?
   No

D. Was the water clouded (turbid) upon removal? unknown

E. Where and how was the barrier cleaned upon removal and where is it stored?

F. Were the barriers cost effective in the owner's opinion, etc.?
   No
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.? 

Provide details:


6) Additional comments and/or concerns:

[I would not install again. Weeds came over barrier.]

Owner Signature: [Signature]  Date: 10/9/16
Write a description for your map.

Legend

1921 Kokanee Way

Google earth
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 2033 ALOHIA DR
Property Code: 96/307
Owner Name: RENE PHYLLIS SCREEE TEES Phone: 310-373-8150
Representative: Owners Phone: 530-544-4960

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.
   Most of the plants were cut prior to installation or raked off

2) Date barriers were installed, and removed for the season. Installed: 5/25/16 Removed: 9/29/16

3) Duration of installation (# of days) 128

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal?  YES

   B. Are any accumulations of dead/decaying plant material observed?  TOO MUCH TURBIDITY OF BOTTOM SILT TO DETERMINE

   C. Were any odors of decaying plant material detected during the deployment?  NONE

   D. Was the water clouded (turbid) upon removal?  YES CONSIDERABLE SILT HAD DEPOSITED ON THE BOTTOM BARRIER BLANKETS

   E. Where and how was the barrier cleaned upon removal and where is it stored?
   ON THE BEACH, WE RAKED THE W/FOIL ATTACHED TO THE BOTTOM BARRIER. ALL MATERIAL IS ON WEST SIDE YARD, UNDER FAVEL, OUT OF SIGHT

   F. Were the barriers cost effective in the owner's opinion, etc.?
   THE COST EFFECTIVENESS WAS MARGINAL AS HAND RAKING MAY ACTUALLY HAVE BEEN CHEAPER AND MUCH EASIER.
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.? None, but:

Provide details:

Your harvesters stayed away from our docks by 30 or more feet, this has caused the milfoil to grow uncontrollably all around our dock and our neighbors. This is now the worse condition since we resided at 2022 since the year 2000.

6) Additional comments and/or concerns:

The present harvesting and hand/skimmer pick-up schedule is definitely inadequate for our location.
We should have floating weed pick up every other day to be effective as the current floats the cut milfoil to our immediate area daily in substantial quantity. Please communicate this to all pertinent authorities. The present schedule is much worse than prior years for our location.

Owner Signature: [Signature]
Date: 10-1-2016

RENE & PHYLLIS SCRIBE

P.S. The black silt blanket actually became an incubator for new milfoil that grew right on top of the blanket with its roots deeply embedded in the blanket. This new growth was up to 3 feet long already. In our opinion this entire process was a physical and economic failure. Feel free to check our blankets for lab analysis.
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 2060 Slalom Ct
Property Code: 24132
Owner Name: Rudy & Mary Pales
Representative: N/A
Phone: 530-541-3969

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.

   None Visible

2) Date barriers were installed, and removed for the season. Installed: 5/15/16 Removed: 10/8/16

3) Duration of installation (# of days) 147

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? Some
   B. Are any accumulations of dead/decaying plant material observed? Yes
   C. Were any odors of decaying plant material detected during the deployment? Yes
   D. Was the water clouded (turbid) upon removal? Yes

E. Where and how was the barrier cleaned upon removal and where is it stored?

   Rinsed off on our lawn. Hung to dry on bulkhead fence, raised. Rolled up in my backyard.
   Returning the loaner barriers to TKPOA. Will call ACC to pick.

F. Were the barriers cost effective in the owner’s opinion, etc.?

   Yes but we had damages
   - Caught in prop, we made 3 panels to replace it
   - On removal the barrier that was not sewn on ends
     a. Only screws on prepale to barrier cloth ripped
     b. On both ends due to weight of water weight + silt
     c. Cloth partially attached but needs repair. This
damage was unavoidable due to how it
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.? NO

Provide details:


6) Additional comments and/or concerns:
Barriers didn’t hold up. The pvc poles that screwed cloth to it tore (both smaller panels with pockets for rebar poles on ends & several more across, spaced evenly was more effective). The seamed edges to insert pvc was better held up.

We made some to replace the prop damaged one. We laid it down & overlapped them. They stayed flush with lagoon. Gas up wasn’t a problem.

Our 2nd barrier w screwed cloth to pvc tore. Looked like unavoidable.

Owner Signature: [Signature]
Date: 10-9-76
Damage:
10' x 10' BARRIER

2060 Slalom Ct.
Lot 24/132
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 2081 Venice Dr # 278
Property Code: 1
Owner Name: Anderson, Gregory
Representative: 
Phone: 408 813-3653

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.

   Light density; less than 6 inches

2) Date barriers were installed, and removed for the season. Installed: 4/14 Removed: 9/18/2016

3) Duration of installation (# of days) 105

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? Yes, Small plants adhered to Bottom of Barrier - Not breaking through.
   B. Are any accumulations of dead/decaying plant material observed? Minimal
   C. Were any odors of decaying plant material detected during the deployment? No
   D. Was the water clouded (turbid) upon removal? Very

E. Where and how was the barrier cleaned upon removal and where is it stored?
   Sprayed w/ water on dock. Please take used to gently clean top & bottom on dock (lawn).

F. Were the barriers cost effective in the owner’s opinion, etc?
   The Barriers were mildly helpful. Our water was very shallow (30' of dock not in water). It looked like there was no harvesting outside our dock front. The weeds encroached around the Barriers. The retreating water from the lake shore plus wind & wave reduced the surface coverage. Having better defined and stronger Barriers would be helpful.
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.? Again, the barriers started to collapse twice what. Provide details:

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<tbody>
<tr>
<td>A</td>
<td>Barrier</td>
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<td>C</td>
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<tr>
<td>D</td>
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</table>

1) Start
2) Completion

6) Additional comments and/or concerns:

When I regularly picked weeds (bought purchased from TKPOA), it had the cleanest outcome.

It would try again if redesigned, stronger barrier.

Maybe a system where all 4 sided are weighted down would help.

Owner Signature: [Signature]

Date: 09-18-2016

* I originally ordered 2 barriers. Due to extreme low level of lake, I let my neighbor (#279) use the 2nd barrier. I will have them fill out this same questionnaire.
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 533 Christie Dr.
Property Code: 
Owner Name: Lianne Peterson Phone: (916) 772-6167
Representative: Phone: 

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.

   Low density growth. 4-6” height.

2) Date barriers were installed, and removed for the season. Installed: 5/20/16 Removed: 10/1/16

3) Duration of installation (# of days) 121

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? a couple blue weeds on top of barrier
   B. Are any accumulations of dead/decaying plant material observed? no
   C. Were any odors of decaying plant material detected during the deployment? no
   D. Was the water clouded (turbid) upon removal? somewhat, but localized to our docks primarily due to walking in the water
   E. Where and how was the barrier cleaned upon removal and where is it stored? cleaned/boxed on our lawn. Stored in Granite Bay.

F. Were the barriers cost effective in the owner’s opinion, etc.
   I made ours, so yes.
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.? Yes.

Provide details:
At the end of the season as the water level dropped, we got our outermost barrier caught in our prop. This was pushed out from our dock a little further. It would not have had this problem, but we engaged the retractor too close to the barrier in shallow water.

6) Additional comments and/or concerns:
At the beginning of the season our prop was caught up in our neighbor’s barrier, which was provided to them by VKRA. This was due to the design of the barrier, which was un-weighted in the center and easily lifted. We replaced the wrecked barrier with one I made and once their boat was on their dock they had no incidents.

*We used our neighbor’s dock to hold our boat as we placed our barriers at our dock.*

Owner Signature: [Signature]

Date: 10-10-16
Dave & Lianna Peterson
503 Christie Dr.
(916) 792-6169

Bottom Barrier Installation

Barriers will be weighted with 5/8" rebar, zip-tied to cloth barrier.
503 Christie
Write a description for your map.

Legend
503 Christie Dr
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 2165 Texas Ave
Property Code: 1
Owner Name: Bartwiser
Representative: ""Mo"" Shing - Tahoe Underwater Services
Phone: 530-357-3455  530-347-9663

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.
   Moderate density 8-10" high

2) Date barriers were installed, and removed for the season. Installed: 5/4/16 Removed: 10/10/16

3) Duration of installation (# of days) 1

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal?  No
   B. Are any accumulations of dead/decaying plant material observed?  No

C. Were any odors of decaying plant material detected during the deployment?
   No

D. Was the water clouded (turbid) upon removal?  No

E. Where and how was the barrier cleaned upon removal and where is it stored?
   Pull rolled up on shore and rinsed off, rolled up and put away

F. Were the barriers cost effective in the owner's opinion, etc.?
   Yes
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.? No

Provide details:


6) Additional comments and/or concerns:

Our barrier was high and dry by the time it was removed, as the water level had dropped. However, during the summer it was a great barrier that not only stopped weeds from growing, but allowed us to marvel into the loch to launch our paddleboard and kayak without sinking in the mud.

Owner Signature: [Signature]
Date: 01/02/16
Lagoon

10' x 20'
barrier mat
6' in water
5' on shore

Lagoon bank

Trees

Lake

gate

Backyard

Property line

2165 Texas Ave

Permit

Proposed barrier and installation by Low & Toboe Urethane Service
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

Project Address: 2460 Balboa Drive
Property Code: 
Owner Name: Currie Munce Phone: 408 219 3804
Representative: Phone: 

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.
   Pot barrier in around May 15. Full bottom coverage but plants only about 1-2 feet high in 5 ft depth of water under slip. Mostly coontail

2) Date barriers were installed, and removed for the season. Installed: 5/15 Removed: 9/25

3) Duration of installation (# of days) 130

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? Yes in gaps around sheet but not under

   B. Are any accumulations of dead/decaying plant material observed? Top of sheets had small amount of slat and covered with dead weed fragments

   C. Were any odors of decaying plant material detected during the deployment? No

   D. Was the water clouded (turbid) upon removal? No

   E. Where and how was the barrier cleaned upon removal and where is it stored?
      Lay flat to dry on beach area. Brushed to clean of dirt and weeds. Weeds pulled up and piled for removal. Rolled up after dry and brushed off.

   F. Were the barriers cost effective in the owner's opinion, etc.? Yes. Difficult to place though in 5 feet on sloping bottom under boat slip. But kept everything which normally grows to surface from slopping boat.
5) Were any incidents reported during deployment, such as: loose barriers, watercraft or swimmer entanglements, chemical spills, etc.?  

Provide details:


6) Additional comments and/or concerns:

Weeds around dock on ends & outside in channel much worse this year. Had to clean water cooling masts several times because of having to back out through them. Barrier coverage only under mooring.

Owner Signature: [Signature]  
Date: 10/21/2016
LAGOON BOTTOM BARRIER: End of Season Report (Due Nov. 1)

2016

Project Address: 1917 Cathedral Ct.
Property Code: 265134
Owner Name: Rob Forz
Phone: 530.687.7696
Representative: Max Stimp, Tahoe Underwater Services Phone: 530.314.9663

CHECKLIST:

1) Describe the density of the plants during initial installation, including average height of plants being covered by barriers.

Very dense.

Height was 4.5 feet.

2) Date barriers were installed, and removed for the season. Installed: May 9
   Removed: Oct. 10

3) Duration of installation (# of days) 155

4) Effectiveness of the installation:
   A. Are any live weeds observed after removal? Yes
   B. Are any accumulations of dead/decaying plant material observed? Yes

C. Were any odors of decaying plant material detected during the deployment? No

D. Was the water clouded (turbid) upon removal? Yes

E. Where and how was the barrier cleaned upon removal and where is it stored?
   Cleaned in yard. Max left the barriers in the front yard for TKPOA pickup.

F. Were the barriers cost effective in the owner's opinion, etc.?
   Absolutely not. My expenditure was a complete waste of money. The weed issues on my dock were worse than if I hadn't used the barriers because the weed harvesters never came anywhere close to my dock. I had huge masses of weeds near the surfac all around my dock for a radius of 20 feet out from the end of the dock.
Attachment B

Bottom Barriers Identification Sign
CAUTION!
<BOTTOM BARRIER>
DO NOT HARVEST AROUND DOCK