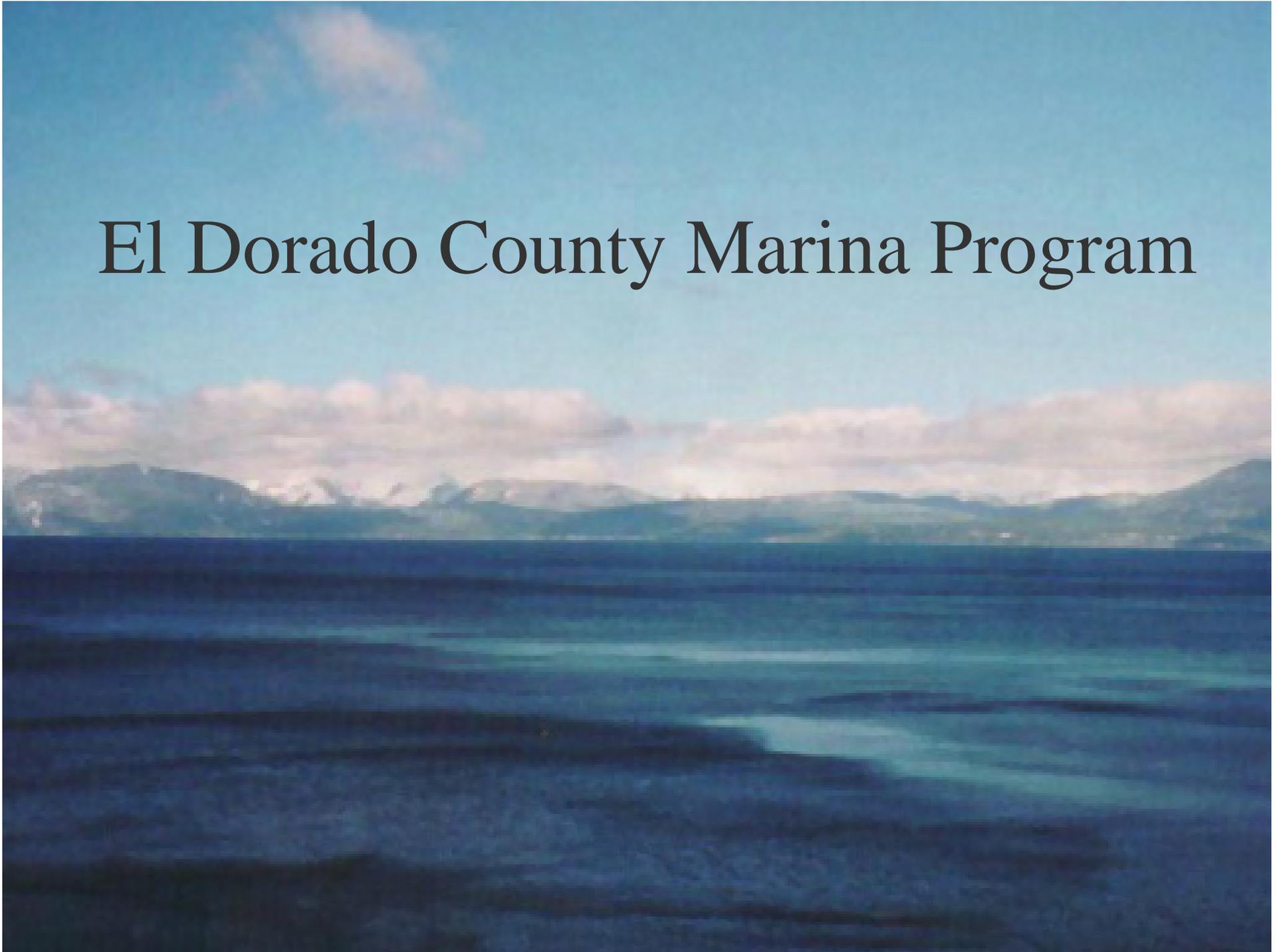


El Dorado County Marina Program



Phases of County Marina Program

- Lake Tahoe Regional Program 1998-2000
- West Slope Regional Program 2000-2004
- Crystal Basin Program 2003 – present
- Sustaining the Program

Marina Tasks Eligible for BG Funding

- Used oil and filter collection.
- Bilge pump out.
- Bilge pad distribution and collection.
- Publicity and premiums.
- Educational materials: Boater kits, signs and flyers.
- Outreach/Dockwalkers.
- Best management practices for marina operators.

Program Objectives

1. Recruit marinas to participate in program.
2. Obtain kit components and absorbent collection equipment.
3. Expand and promote used oil collection.
4. Conduct public outreach and education.

Objectives Continued

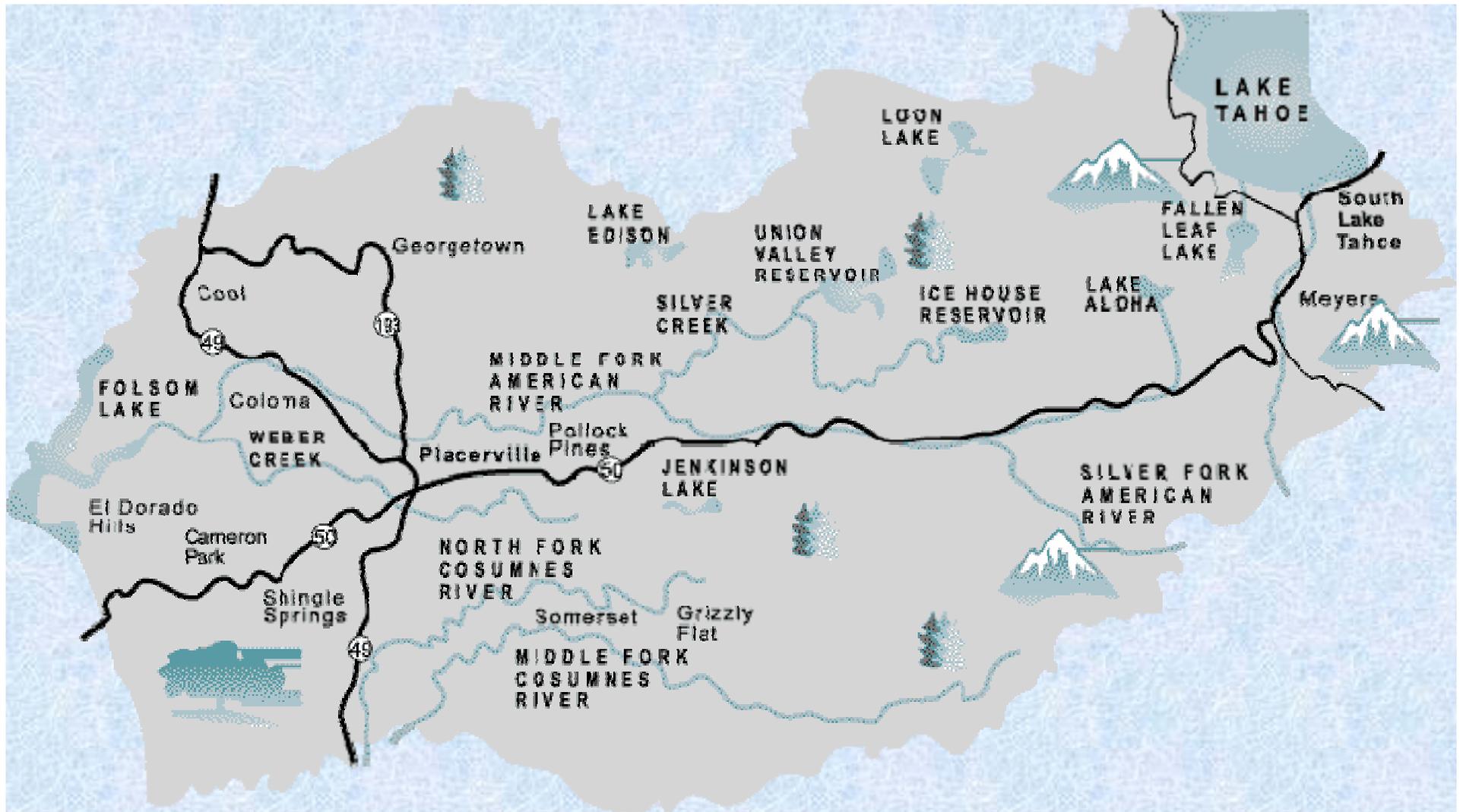
5. Support seasonal bilge pad exchange at marinas.
6. Obtain/install bilge pump out and bilge water treatment equipment.
7. Promote discussion of clean boating/marina related issues.

1. Recruit Marinas

- All of the 19 Lake Tahoe public access marina operators were contacted. Of those 17 volunteered to participate. At each of the other 6 large EDC lakes, all operators participated.
- Contact and meet with all marinas operators at the beginning of each boating season.
- Tahoe marina operators influenced content of kits.

- Carnelian Bay SB
- Meeks Bay
- Sunnyside
- Sand Harbor
- Tahoe Keys
- SLT City
- Fallen Leaf
- Timber Cove
- Camp Richardson
- Lakeside
- Meeks Bay





- Folsom, Jenkinson, Union Valley, Ice House, Fallen Leaf, Echo Lakes and Tahoe

2. Supplies and Equipment - Clean Boating Kit

- First kit included: bucket, absorbent pad, absorbent pillow, floating key chain, ski flag, brochure, plastic bag, laminated card, towel and funnel.
- Initial cost per kit: \$9.91
2nd phase \$8.63, Folsom \$5.49
- \$ Staff time to assemble and distribute.



Storage of Supplies

- Storage space is needed for thousands of buckets, bales of absorbent and all other kit components.
- SLT City airport hangar.
- Storage container for Folsom \$3,800 (22'), EDC \$6,700 (40') and rented \$100/mo (20').
- Storage building \$250,000



Saturated Absorbent Collection

- Hazardous waste storage sheds: \$4,400 ea.
- Funding: Block and Opportunity grants.
- Drums inside units or in service shops.
- Nevada Marinas: supplies and labor, not equipment.





ABSORBENT PAD COLLECTION FACILITY Deposit Saturated Oil Absorbent into Slot

**No Other Hazardous or Solid Wastes Accepted
EDC Ordinance Code Chapter 8.38. Facility Operated by
Echo Chalet and**

EDC ENVIRONMENTAL MANAGEMENT DEPARTMENT

530-621-5300 www.co.el-dorado.ca.us/emd

Funded by a grant from California Integrated Waste Management Board



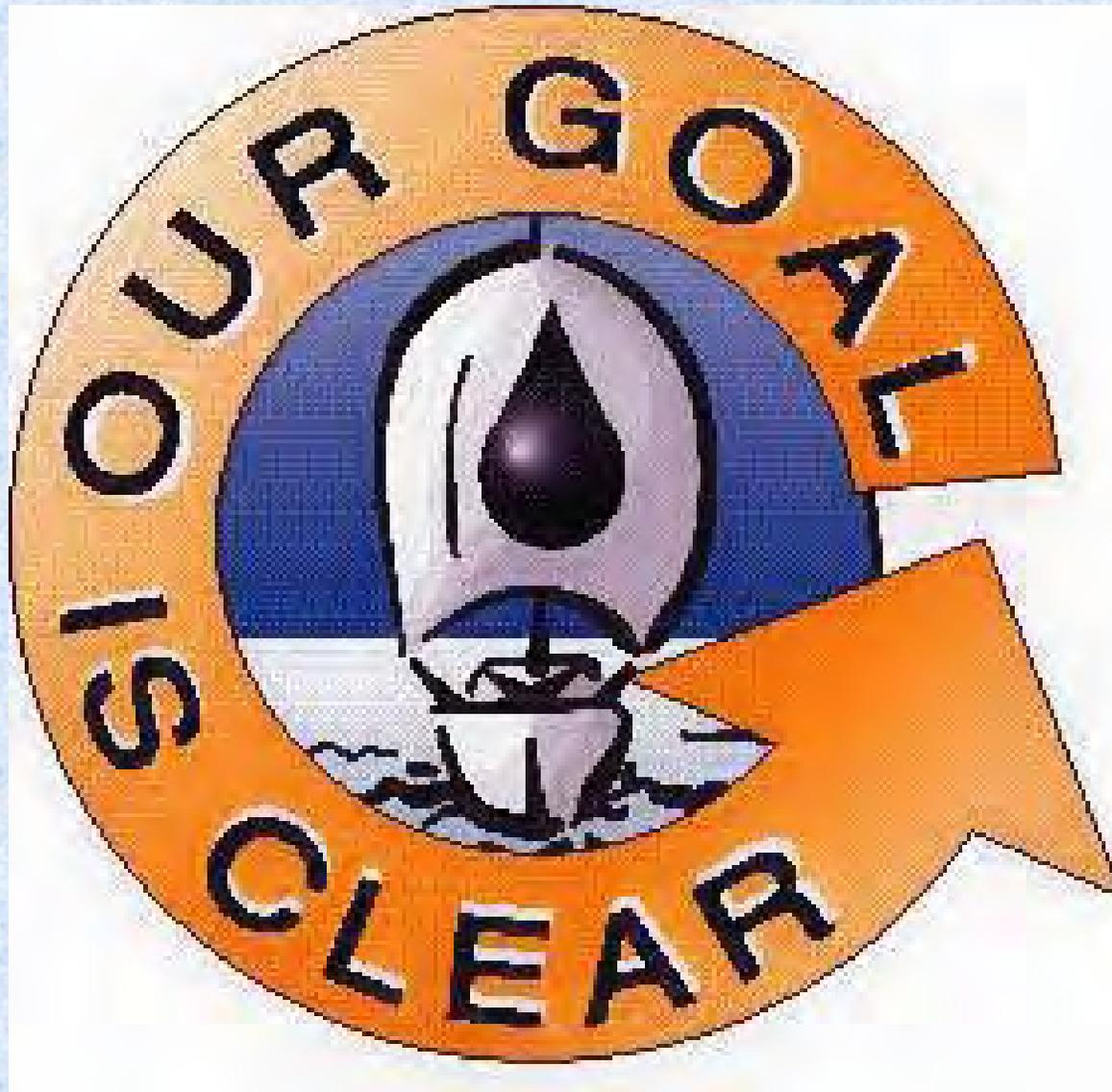
3. Expand and Promote Used Oil Collection Opportunities

- In 1996 we had 4 certified centers in the EDC portion of Tahoe basin. Today there are 9.
- At some of the facilities pads and oil are collected drums in shop areas, at others we have small sheds and ASTs (\$10k).



4. Advertising and Outreach

- Advertise Special Events and Collection Centers via Paper, Radio, Bus Signs, Programs.
- Develop and Distribute Logos & Flyers.
- Conduct Outreach Events (\$ staff time)
- Conduct Surveys (survey card \$0.14)
- Signs on Message Boards and Storage Facilities
- Theater Ad (\$285/month)
- Billboard (\$1,200/month)



Original Logo

**OIL & WATER
DON'T MIX**



**RECYCLE
USED OIL**

Hybrid of
Department Logo

Theater Advertisement

CONTROL BILGE WASTE OIL



Obtain Oil Absorbent Pillow



Place Pillow in Bilge



Deposit Used Pillow in Collection Unit

THANK YOU EL DORADO COUNTY RESIDENTS
EDC ENVIRONMENTAL MANAGEMENT 621-5300 www.co.el-dorado.ca.us

Billboard on Hwy 50



ENJOY CLEAN BOATING



CONTROL BILGE OIL

CALL 1-800-CLEANUP OR VISIT WWW.CO.ELDORADO.CA.US/EMD FOR MORE INFO

FUNDED BY A GRANT
FROM CALIFORNIA
INTEGRATED WASTE
MANAGEMENT BOARD





KEEP FOLSOM LAKE CLEAN!

FREE!

 Get your FREE Bilge Oil Clean Up Kit at Folsom Lake Marina

Folsom Lake Marina is offering free bilge oil kits to assist water recreation users with the prevention of oil discharges into Folsom Lake. Oil can get into the bilge in a number of ways.

The bilge absorbent helps keep our lakes and rivers clean and free from oily contamination. The kit comes complete with an oil absorbent pillow (that is placed in your boat bilge) and a full-sized bucket (for transporting the used absorbent back to the Folsom Lake Marina Snack Bar.

Pick yours up today!



OIL ONLY SPONGE



You may pick up your FREE Bilge Oil Cleanup Kit at Folsom Lake Marina Snack Bar off Green Valley Road between Francisco Drive and Hormon Island Drive.



For more information log on to: www.FolsomLakeMarina.com



Funded by a Grant from the California Integrated Waste Management Board.

This program is sponsored by the El Dorado County Environmental Management Department, City of Folsom Public Works Department, Folsom Lake Marina and the Folsom Lake Recreation Area.

- Sign placed near launch ramps at Folsom and Echo Lakes

Laminated Card

- Water resistant
- Map of Lake Tahoe showing participating marinas
- Instructions for using absorbents
- List of certified used oil collection centers.
- General lake info

Flyers

- List of Collection Facilities
- Don't Top Off
- Use a Funnel
- No Detergent
- Use Absorbents
- Recycle Oil & Filters
- Hazards of Oil Release
- Minimize Wakes

Our Goal
Is **C**lear:

Preventing
Pollution from
Bilge Waste Oil &
Promoting Clean
Boating
Practices!



El Dorado County
Used Oil Recycling Program



Funded by a grant from the California
Integrated Waste Management Board

Did you know that...

- ♦ One gallon of used oil can contaminate one million gallons of fresh water. Even one quart, when spilled, can cover up to 2 acres of the water's surface.
- ♦ When used oil is pumped from a bilge into a lake it harms the lake's ecosystem and impacts water supplies for everyone !! There are numerous drinking water intakes along the American River from Strawberry to the San Francisco Bay. Lake Tahoe is a National treasure that you can help protect.

**Practice clean boating every time
you go out on the water!**

H₂O

- ♦ Using detergents to disperse petroleum spills is only a cosmetic treatment. Oil/detergent mixtures are harmful to fish & other aquatic life.
- ♦ Trash can harm wildlife and make a beautiful lake look ugly. Avoid letting trash blow overboard. Stow it and properly dispose/recycle when back on shore.
- ♦ The discharge of oil causing discoloration or leaving a film or sheen on the water is prohibited by federal law.
- ♦ Excessive boat wakes can contribute to shoreline erosion and degrade water quality.

Controlling Bilge Oil Pollution is as Easy as 1-2-3

Step 1:

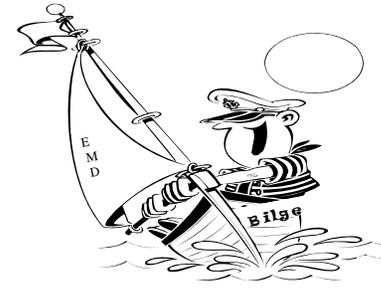
Obtain a free "Clean Boating Kit" during our outreach events or obtain an absorbent pad from the marina operator.

Step 2:

Secure the bilge pillow (oil absorbent pillow) in your bilge area. Check the pillow to ensure that it does not block the bilge pump or sensor.

Step 3:

When the bilge pad is saturated (i.e., it no longer absorbs oil & there is new oil in the bilge water) place it in a plastic bag or the "Clean Boating Bucket" provided. Take it to the receptacle at the marina for safe disposal.



**Remember:
Oil & Water Don't Mix
Recycle Used Oil & Filters**

Call 1-800-CLEANUP
for the nearest location of a Used Oil &
Filter Collection Center

You Can Play an Important Part in Clean Boating

- ◆ **BE AN EXAMPLE TO OTHERS:** By being a "Clean Boater" other boating enthusiasts may follow your lead.
- ◆ Prevent gas spills by not **TOPPING OFF** your fuel tank. Skim spills with absorbents.
- ◆ Use a **FUNNEL** to add oil to your engines. Wipe up any spills.
- ◆ **RECYCLE** your used oil and filters.
- ◆ Don't use **SOAP** or **DETERGENT** to disperse spills. They simply make the oil water soluble.
- ◆ Use **ABSORBENTS** to skim oil off the water in your bilge. The following marinas can provide you with absorbent pads and will accept saturated absorbents for disposal.

On the West Slope:

- > Echo Lake
- > Ice House Reservoir
- > Union Valley Reservoir
- > Sly Park/Jenkinson Lake
- > Folsom at Browns Ravine

In Tahoe:

- > El Dorado Boat Ramp
- > Camp Richardson
- > Fallen Leaf Lake Marina
- > Lakeside Marina
- > Meeks Bay Marina
- > Tahoe Keys Marina
- > Timber Cove Marina

Sponsored by El Dorado County
Environmental Management Department
530-573-3450—Tahoe
530-621-5300—Placerville
www.co.el-dorado.ca.us/emd



**FREE FOR CITY OF FOLSOM
RESIDENTS - DOOR TO
DOOR COLLECTION OF
USED OIL AND A FEW
OTHER HHW ITEMS**

The City of Folsom will pickup some household hazardous wastes from your residence. We will pickup ONLY, used motor oil, oil filters, antifreeze, latex paint, automobile and motorcycle batteries (lead acid), and nickel-cadmium batteries.

Call the City of Folsom Hotline at (916) 355-8397 to schedule collection. Please follow the instructions on the Hotline.



**RECYCLE
USED OIL**

**For information
about recycling
of used oil or
disposing of
household
hazardous
waste in the**



**RECYCLE
USED OIL**

**Sacramento/El Dorado Region
call:
1-800-CLEANUP**

**THE FOLLOWING CERTIFIED USED
OIL COLLECTION CENTERS ACCEPT
YOUR USED OIL AND FILTERS FREE
OF CHARGE AND OFFER YOU \$0.04
PER QUART FOR YOUR USED OIL
DURING WORKING HOURS:**

**SpeedDee Oil
Change & Tune Up
6604 Folsom-
Auburn Road
(916) 988-0531**

**Kragen Auto Parts
1191 Riley Street
(916) 983-9884**

**Jiffy Lube
709 East Bidwell
Street
(no filters)
(916) 983-1960**

**Folsom Lake Ford
12755 Folsom
Boulevard
(916) 353-2040**

**Folsom Automotive
Center
915 Bidwell Street
(916) 985-3455**

**You can transport up to 20 gallons
per day in containers of 5 gallons or
less.**

**Changing oil (by individual boat owners) is not
allowed in the Folsom Lake Recreation Area.**

CONTROL YOUR BOAT BILGE OIL



AT FOLSOM LAKE

**IT'S EASY
IT'S FREE**

OUR GOAL IS CLEAR!!

**This Program is sponsored by the El Dorado County
Environmental Management Department, City of Folsom
Public Works Department, Folsom Lake Marina, and the
Folsom Lake Recreation Area.**



**Funded by a grant from the
California Integrated Waste
Management Board.**



♻️ Printed on Recycled Paper

One gallon of used oil can contaminate one million gallons of fresh water.

When used oil enters Folsom Lake through boat bilge pumping, it harms the Lake's ecosystem and impacts water supplies for everyone downstream!!! There are 9 drinking water intakes between Folsom lake and the San Francisco Bay.

Control your bilge Oil with
OUR free
**BILGE OIL
KITS...**
ITS EASY!!!



HOW CAN YOU CONTROL YOUR BILGE OIL?



ITS AS EASY...

as 1-2-3

STEP 1

Go to the Folsom Lake Marina Snack bar and get your free bilge absorbent kit.

STEP 2

Place the bilge pillow (oil absorbent pillow) in your engine bilge. Always check the pillow to ensure that it does not block the bilge pump or sensor.

STEP 3

When the bilge pad is saturated (e.g., it no longer absorbs oil and there is new oil in the bilge water) place it in the bucket provided. Then take it to the Folsom Lake Marina Snack Bar and get a new bilge pillow.

THE GOAL IS CLEAR!



A CLEANER FOLSOM LAKE!!!!

CLEAN BOATING MEANS:

- Never dump raw sewage into the lake Use floating potties, public toilets, and the Marina pump-out facility.
- Think ahead! DON'T LET LITTER GET AWAY!!!!
- Use as little soap as possible or if you must use soap use low phosphate soap.
- Prevent fuel spills by only filling your tank to 95% full.
- Eliminate oil discharges into the lake. Use our bilge oil kit. Always funnel oil into your engines. Wipe away spilled or leaking oil before heading out into open water.



Public Outreach Events

- Schedule events to coincide with existing events.
- Department staff and volunteers from other agencies and the Coast Guard Reservists
- Staff costs average \$200/person/day/event



Cost Effective Staffing – Summer Intern



Direct Outreach to Tahoe Keys



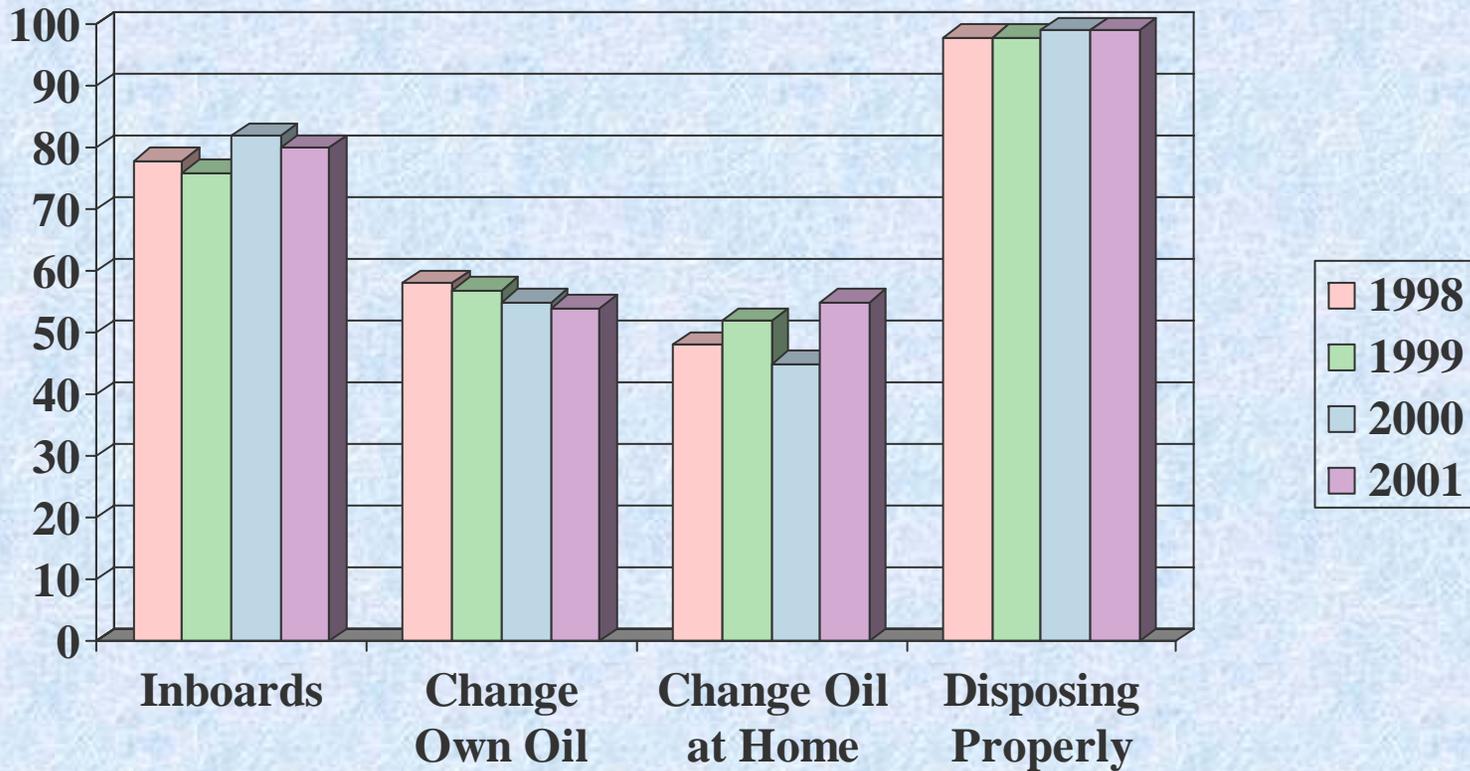
Survey Content and Evaluation

- What type of boat do you own?
- Do you change your own boat motor oil?
- If not, where does your oil get changed?
- How do you dispose of the waste oil?
- What do you do if oil gets into your bilge?

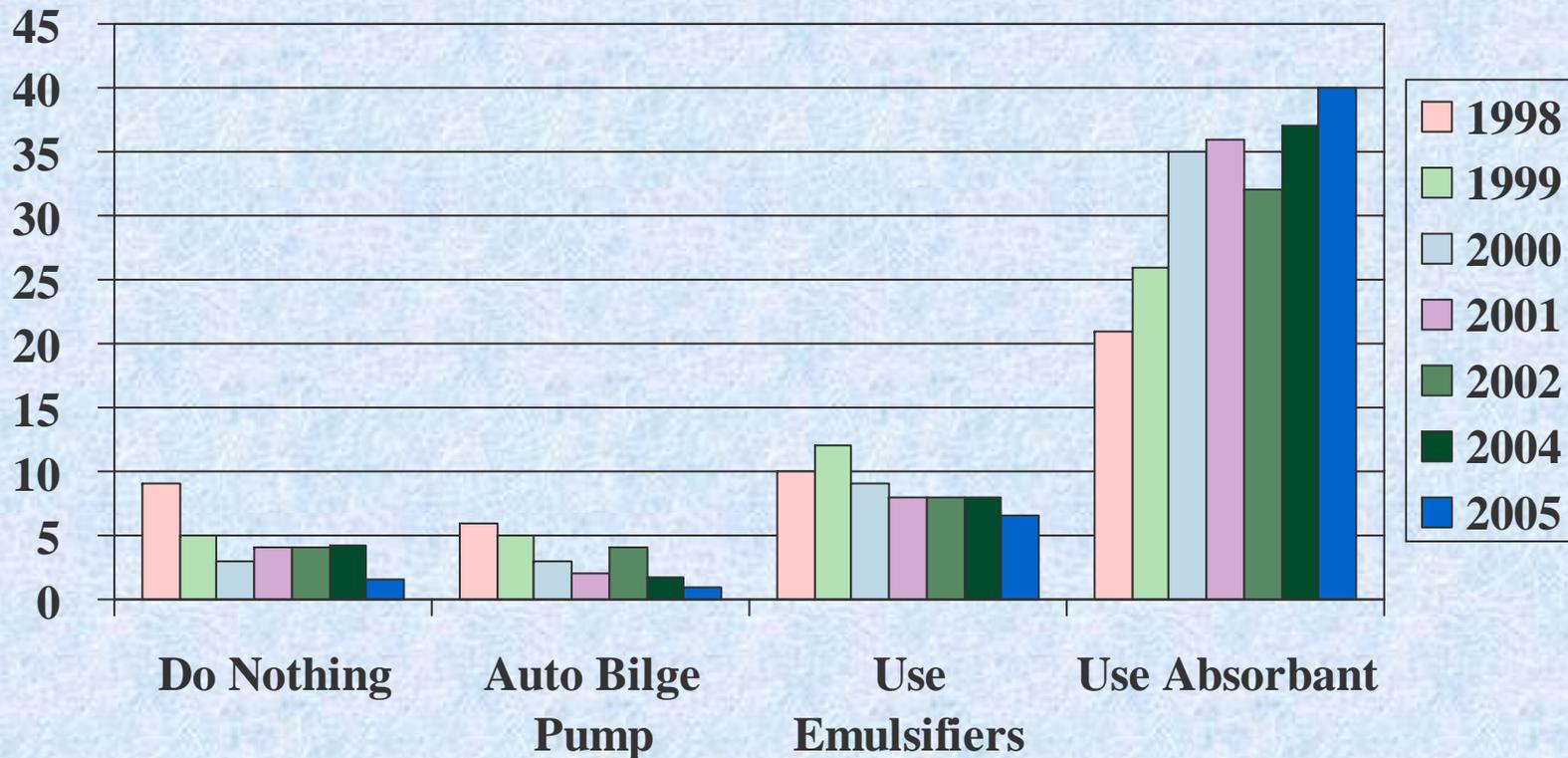


Survey Responses

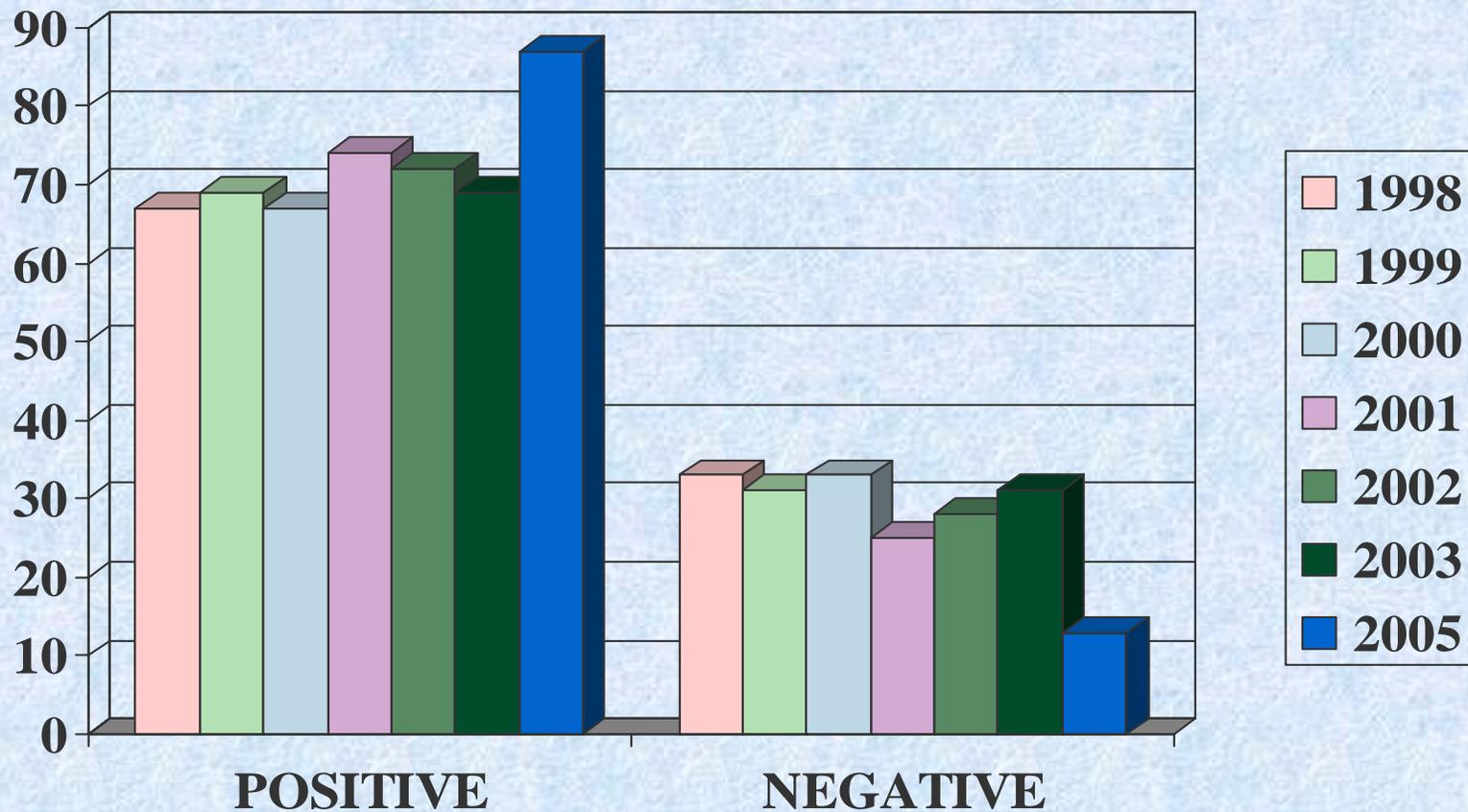
% of total (3780 surveys)



“What do you do if oil gets into your bilge?”

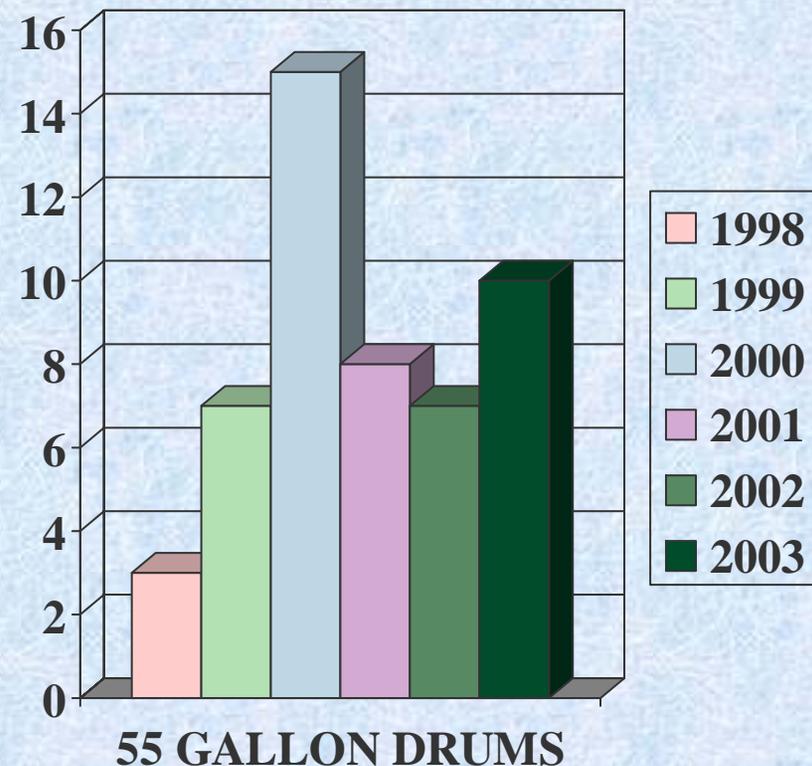


Oil in Bilge Summary (4997)



5. Bilge Pad Exchange

- Pads and pillows for different uses.
- Distributed by staff at events and by marina operators all season.
- Storage facilities.
- Transport by County.
- Disposal \$267/drum.
- Disposal by marinas.



Transportation and Consolidation

- 18' flatbed
\$32,000.
- Funded by
HD6.
- Permitted by
DTSC.
- Hazmat
driver's
license.



6. Bilge Pump Out Equipment

- Initial cost estimates (\$5,000) vs. actual cost (\$30,000)
- Space Limitations
- Installation/Maintenance
- Operation
- Commercial vs. recreational boats



Bilge Pump Unit Permitting

- Collected liquid must be tested for oil, gasoline, diesel, VOCs & TOC to determine proper onsite treatment tier. Our agency is also the CUPA.
- Treated water monitored for pH, TPH, TSS, and VOCs for discharge to POTW.
- Recovered oil recycled or FB.

7. Promote Discussion of Clean Boating and Related Marina Issues.

- IMAGES (Inland Marina Advisory Group Environmental Summit)
- MORE (Marina Oil Recovery Effort) Tahoe 2003
- CCBN

Sustainability

- Infrastructure is in place for all EDC Marinas - Tahoe, Fallen Leaf, Echo, Ice House, Union Valley, Jenkinson and Folsom lakes.
- Estimate of ongoing costs to continue program at current level is \$20k/year plus staff time. Funds to come from block grants, property tax assessment (\$3/parcel/year) and solid waste franchise fees.
- We will be submitting a grant application (HD15) for funds to construct shed for protection of bilge pump out unit at Ski Run Marina.

Summary

- Program now covers entire County.
- Survey data indicates positive behavior changes.
- Several funding sources used.
- Assistance was received from Marina Operators, Other Agencies and volunteer groups.
- We will continue to support all marinas and host outreach events each year.

