

RICHARDSON'S BAY REGIONAL AGENCY

Thursday, September 15, 2011

5:30 P.M. to 7:00 P.M.

Sausalito City Council Chambers 420 Litho Street Sausalito, CA

PUBLIC COMMENT IS INVITED CONCERNING EACH AGENDIZED ITEM PURSUANT TO THE BROWN ACT. PLEASE LIMIT YOUR COMMENTS TO THREE (3) MINUTES.

AGENDA

5:30 P.M. CALL TO ORDER - ROLL CALL

1. Minutes of July 21, 2011 Meeting
2. Review report of Harbor Administrator
3. Approval of prior expenditures for July 1 – September 10, 2011
4. Review and approval of Boating and Waterways AWAFF and VTIP grants for 2011-12
5. America's Cup report
6. TMDL status update
 - a. Review draft Houseboat Marinas Report
7. Public comments invited concerning items NOT on this Agenda (3-minute limit)
8. Staff comments
9. Board member matters

NEXT MEETING: The next meeting date has not yet been set, pending Board scheduling.

A COMPLETE AGENDA PACKET IS AVAILABLE FOR VIEWING ON THE RBRA WEBSITE <http://rbra.ca.gov> , AND AT THE SAUSALITO CITY LIBRARY.

TO RECEIVE AN ELECTRONIC MEETING NOTICE, PLEASE EMAIL REQUEST TO DON ALLEE AT dallee@co.marin.ca.us

Marin County Community Development Agency, 3501 Civic Center Dr. Room 308, San Rafael, CA 94903
Office 415/289-4143 Cell 415/971-3919 bprice@co.marin.ca.us

RICHARDSON'S BAY REGIONAL AGENCY

MEMORANDUM

September 9, 2011

TO: RBRA Board

FROM: Ben Berto, RBRA Clerk

SUBJECT: September meeting

Board members:

Some interesting topics on the Board's agenda this meeting. AC34 preparations continue. Staff (with the assistance of Member Sears) developed RBRA's response letter (attached) on the America's Cup Draft EIR, and is including a memo on this topic in this packet. A lot of agencies and other groups are weighing in, some of which might affect RBRA. Our agency is requesting assistance with two anticipated event-related impacts. While the DEIR is a focus of RBRA efforts, it is not our only AC34 oar in the water. Staff looks forward to Board discussion and direction on the topical items.

Staff from RBRA and County Environmental Health Services convened a houseboat harbormasters and Floating Homes Association stakeholders meeting on the State-mandated Total Maximum Daily Load (TMDL) and resulting houseboat monitoring program. It was a productive discussion and Staff has since adjusted the draft Houseboat Marina Program prepared by Robert Turner from EHS in response to that feedback (see attachment). Staff requests Board direction on the document its program recommendations, and anticipates returning to the Board with a finalized version.

Staff has been busy securing State Department of Boating and Waterways grant funding to carry forward RBRA's active vessel demolition program. One of the grants in the packet is for \$91,043 and has already been approved by Chair Wachtel in the interim between Board meetings (grant included for your Board's reference). The other requests Board action to approve a \$20,000 Vessel Turn-In Program (VTIP) grant. As always, RBRA will be responsible for its 10% matching share. To Staff's knowledge, RBRA demolishes more boats at lower cost than any other equivalent program in the State, a testament to the effectiveness of Harbormaster Price.

Thanks to member agencies for their FY '12 agency contributions. The one outstanding invoice is anticipated to be forthcoming within a week or two.

Based on meeting attendance rsvp's, Staff looks forward to seeing a full slate of Boardmembers at the meeting. I will be out of town most of next week but am returning in time for the meeting.

RICHARDSON'S BAY REGIONAL AGENCY
MINUTES OF JULY 21, 2011
HELD AT SAUSALITO CITY HALL CHAMBERS

MEMBERS PRESENT: Kate Sears, County of Marin; Emmett O'Donnell (Tiburon); Herb Weiner (Sausalito alternate)

ABSENT: Chair Ken Wachtel; (Mill Valley); Jerry Butler (Belvedere); Jonathan Leone (Sausalito)

STAFF: Bill Price (Harbor Administrator); Ben Berto (RBRA Clerk)

Meeting called to order at 5:35 PM

Minutes of May 19, 2011 RBRA Meeting

Minutes were approved unanimously.

Review report of Harbor Administrator

Mr. Price described a recent vessel recovery, and his interactions with the Coast Guard and contractors. He also described his meeting with the advocacy group REST and the interest in getting them to advocate for the free pump-out service for the anchor-outs.

Bob Mitchell asked if the sunken vessel was in RBRA waters, which it was. Mr. Berto stressed the need for a consistent effort in keeping the pump-out service moving forward, and how REST might be able to assist RBRA by providing that focus.

Report was accepted.

Member Leone arrived late and ceded his chair to Alternate Member Weiner after a brief discussion.

Prior Expenditures

Member O'Donnell asked if costs for vessel disposal could be recovered from salvage. Mr. Price responded that on large vessels, the contractor figures the salvaged material cost into the final bid price, thus keeping it lower than it would be otherwise. Member Sears asked what the vessel disposal size limits were for the RBRA, and Mr. Price replied that for the most part contractors were hired for disposal once the vessel exceeded approx. 40'. Mr. Weiner asked if we could go after the families of the vessels for compensation, but Mr. Price cautioned against it due to the outlook of the courts. Mr. Berto stated that the voluntary approach taken by the RBRA was quite efficient, and contrasted us with Contra Costa Co., which employs 6 deputies and has a much larger budget to do about the same amount of demolition work annually as the RBRA.

Peter Morehead pointed out that a large amount of taxpayer money is going out to salvage vessels of private citizens who anchor and store their property on public trust lands. He asked the Board to consider their fiduciary and public responsibilities.

The expenditure report was accepted.

Review and approve of Boating and Waterways AWAf grant amendment and RBRA budget amendment

The DBW AWAf amendment was passed unanimously and the RBRA budget amendment was also passed unanimously.

Discussion of the America's Cup

Mr. Berto began the discussion stating that the draft EIR was proceeding at a breakneck speed, and that it was available linked to our website. He said that the DEIR was unusual in that it pointed out the incomplete nature of the boat traffic section of the "People Plan". RBRA has looked into the jurisdiction of the proposed megayacht anchorage area and, since New Zealand reported a \$155M spike in megayacht-related income, it is seen as an economic benefit for Sausalito. He pointed out that the anticipated demand for public services has already spawned a regular working group of law enforcement participants, and that the RBRA should participate in the DEIR comments (due August 25th) through an ad hoc Board subcommittee. He anticipated local agencies and cities meeting with Member Sears in August to achieve a more global approach. He also stated that the RBRA Mooring Field option had been rejected by the BCDC in the past, and that with our small budget and limited timeframe, it is unlikely at this time.

Alt. Member Weiner said that Sausalito was pushing for a dredging plan to get the channel back to 23' depth. Member Sears reported that the first of monthly meetings for the Marin AC34 group was scheduled for next Wednesday at 6:30 in Mill Valley.

Paul Kaplan of KKMI Boatyard and a member of the Sail Sausalito group, explained the critical path of their workshops and these determined that the Mooring Plan was important; he felt the present situation was unsustainable and that BCDC was now in a better position look favorably upon it. He proposed that a private marina management request for proposals be issued so that professional marina management companies could bid on the operation and installation of the field. He stated that neither KKMI or Clipper Yacht Harbor would submit proposals due to conflict of interests. Mr. Mitchell brought Staff to task for not doing anything; he was critical of the RBRA's efforts to date and didn't feel that there would be sufficient enforcement for a mooring field. Mr. Morehead liked Mr. Kaplan's proposal and he felt that the same issues of enforcement would be an issue. He stated that no other jurisdiction up and down the coast allowed residential use on moorings, and he pointed to the recent decision at Lawson's landing as an example of removing residential use on public land.

Member Sears said that the RBRA should comment on the DEIR. Member O'Donnell questioned how to accomplish this. Member Sears volunteered to quarterback the effort. Member Weiner advised her to speak with Heidi Burns at Sausalito Planning Department and also to contact the new police chief Jennifer Tejada. Member Sears said that the enforcement issue was very important and the agency's ability to implement policies is limited. Member O'Donnell advised spending time reviewing ordinances and time periods, towards establishing a firm policy. Alt. Member Weiner stated that the Sausalito Police department was training on the new Corps of Engineers boat to use it to increase their presence on the water

TMDL status report

Mr. Berto reported that Staff hadn't met with houseboat managers to date, but the vision for the monitoring program was largely to memorialize the efforts already taking place, so marinas can meet the goals without a lot of changes / problems with their current system of managing waste. He recognized that the ongoing source of the houseboat problem is the Gates Cooperative, and he promised that a Draft Houseboat Implementation Program would be available by the next meeting.

Public Comment

Member Leone stated that Sausalito was not increasing 72-hour enforcement on the water. He said the new Chief was looking at warrants more closely to remove (un)wanted elements.

Staff Comments

Mr. Berto asked for Board members to check their calendars in order to ensure a quorum for the September 15th meeting, since we barely made quorum this evening.

Board Member Matters

None

The meeting was adjourned at 6:35 PM.

NOTE: The next meeting of the RBRA is scheduled for **September 15, 2011 at 5:30 PM** at the Sausalito City Hall Chambers.

RICHARDSON'S BAY REGIONAL AGENCY

HARBOR ADMINISTRATOR'S REPORT

September 7, 2011

WORKING RELATIONSHIPS

- **Dept. of Boating and Waterways** – 1) Both grants from DBW have been funded and are in the final stages of approval, thanks to the early passage of the State budget. 2) Submitting the last of the 2011 AWAFF / VTIP invoices for reimbursal. AWAFF will total \$24,431, and VTIP will total \$12,298. 3) Attended the Boating and Waterways Commission meeting in Sacramento to speak in support of the Abandoned Vessel program and discuss ways to fine-tune the process
- **US Coast Guard** – Meeting with abandoned vessel working group on a regular basis
- **Sausalito Police Department** – 1) Worked together with SPD to identify and salvage a 34' sailboat that sunk. 2) Working with SPD and Public Works to keep their city-owned docks clear of unauthorized vessels.
- **Marin Co. Sheriff** – Assisting with a stolen vessel investigation.

DEBRIS REMOVAL

- Disposed of 10 vessels. 2 boats are currently impounded. 2 are in lien sale status.
- Beach clean-up efforts ongoing using Marin Co. Community Service volunteers.
- Removed a large, partially submerged, uncoiled length of cable from the seaplane landing zone that was roiled up during the tsunami.

RAPID RESPONSE

- A 25' motorboat was recovered and secured by Parker Diving. Vessel was demolished.
- A 34' sailboat was pumped out and is being held for lien sale.

WATER QUALITY

- Met with local houseboat harbormasters and Floating Homes Assn representative to review the implementation plans for the TMDL program and comment on the draft houseboat plan.
- Still working with representatives from the REST program, a homeless advocacy group, who will be working with the anchor-out community to encourage more use of the pump-out boat.
- Dry season water testing began on 9/1 and results should be available by the end of October. Weekly beach results from Schoonmaker Beach in Sausalito are consistently good and indicate the water is safe for recreational contact.
- Working to come up with an extra pump-out vessel to be used during AC 34.

OTHER

- Attending an 8 hour hazardous material handling class to keep up with EPA requirements.
- Working with Arambaru Island restoration project manager to utilize the Corps of Engineers ramp for loading / unloading of heavy equipment.
- Attending regular meetings with the Marin County AC 34 group, and AC 34 SF Regional Government meetings.

Richardson Bay Regional Agency

Vessel Disposal List July - September 2011

Date	Name	Type	Amount	
7/23/2011	Flying Fish	32' wooden sailboat	1,792.25	abandoned - VTIP
7/23/2011	Bluebird	25' f/g sailboat	556.36	abandoned - VTIP
7/23/2011	Gladys Friday	18' runabout	200.00	abandoned
7/27/2011	Lopeza	40' wooden powerboat	3,780.00	abandoned - VTIP
7/28/2011	Hippy Chix	36' wooden sailboat	4,435.00	Sunk
8/20/2011	Vivacity	22' f/g sailboat	1,014.00	abandoned - VTIP
8/20/2011	Klaus	24' f/g sailboat	200.00	abandoned - VTIP
8/20/2011	Caliban	20' f/g sailboat	0.01	abandoned
8/20/2011	Columbia 22	22' f/g sailboat	0.01	abandoned
8/21/2011	Flying Cloud	35' f/g sailboat	4,600.00	abandoned

12 vessels total 16,577.63

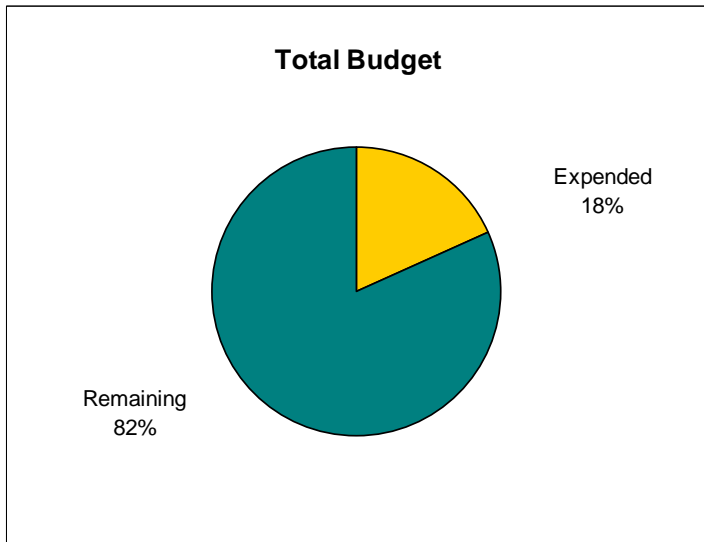
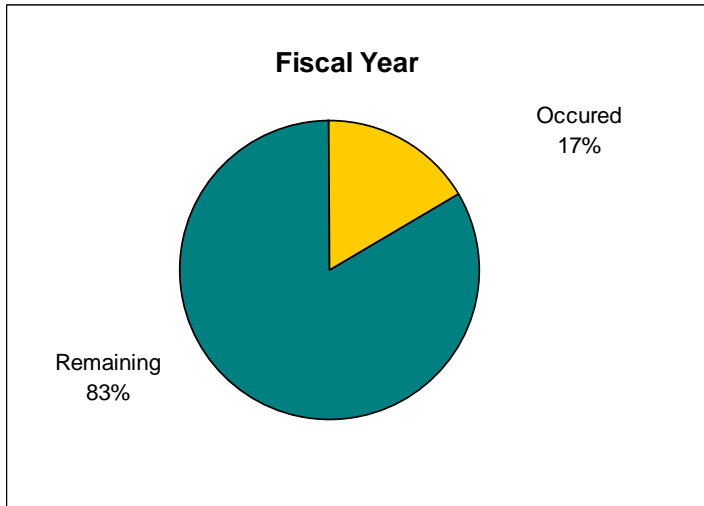
RBRA FY 2011 - July 1, 2011 - September 10, 2011 BALANCE SHEET

COST ELEMENT	DESCRIPTION	EXPENSES	REVENUE
City Contribution	Marin County JPA membership dues		-97065.00
Bldgs & Grounds Rent	Mooring - Bolton		-150.00
Bldgs & Grounds Rent	Mooring - Snowberg		-150.00
City Contribution	Belvedere JPA membership dues		-17129.00
Bldgs & Grounds Rent	Mooring - Fudge		-75.00
City Contribution	Mill Valley JPA membership dues		-11419.00
City Contribution	Tiburon JPA membership dues		-22839.00
Sales and Services	Sausalito Police - maintenance split on boat		-2010.38
Bldgs & Grounds Rent	Mooring - Snowberg		-150.00
Bldgs & Grounds Rent	Mooring - Bolton		-150.00
Bldgs & Grounds Rent	Mooring - Fudge		-150.00
Bldgs & Grounds Rent	Mooring - Fudge		-150.00
total revenues			-151437.38

Rent	Schoonmaker Point Marina - slip rental	147.50	
Prof Services	MT Head - June pump-outs	350.00	
Prof Services	MT Head - July pump-outs	350.00	
Rent	Schoonmaker Point Marina - slip rental	275.32	
Rent	ICB - office rental	420.00	
Rent	Libertyship Way - dry storage rental	240.00	
Prof Services	Dave's Diving - raise sunken vessel	1380.00	
Ins - Gen Liability	Insurance Premiums - vessel policy	1085.00	
Rent - Equip Rental	Hertz rental - backhoe	556.13	
HazMat Clean Up	Bay Cities - debris box removal	394.00	
Prof Services	TNT / Martin Bros. - boat disposal	9036.00	
Prof Services	Fleshman - day labor	200.00	
HazMat Clean Up	Bay Cities - debris box removal	1362.00	
Prof Services	Wedlock Marine Survey	235.00	
Prof Services	Fleshman - day labor	200.00	
Prof Services	San Rafael Yacht Harbor - boat disposal	3600.00	
Prof Services	Alexander - website maintenance	325.00	
Rent - Equip Rental	Hertz rental - backhoe	438.16	
Com Srvc - Broadband	AT &T internet	84.08	
Com Srvc - Broadband	Earthlink internet	7.90	
Rent	Clipper Harbor - impound	478.00	
Maint & Rep Su - Oth	KKMI Boatyard - annual maintenance	1000.00	
Maint & Rep Su - Oth	KKMI Boatyard - annual maintenance	195.59	
Maint & Rep Su - Oth	Hirschfeld Engine Repair - patrol boat annual	814.78	
Oil & Gas	Clipper Fuel dock	235.45	
Prof Services	Fleshman - day labor	200.00	
Prof Services	Dave's Diving - raise spool of cable	325.00	
Prof Services	Parker Dive Service - rapid response on vessel	750.00	
HazMat Clean Up	Bay Cities - debris box removal	1557.25	
Prof Services	San Rafael Yacht Harbor - boat disposal	3780.00	
Rent - Equip Rental	Hertz rental - backhoe	556.36	
Prof Services	Wedlock Marine Survey	235.00	
Prof Services	Wedlock Marine Survey	235.00	
Prof Services	San Rafael Yacht Harbor - boat disposal	4200.00	

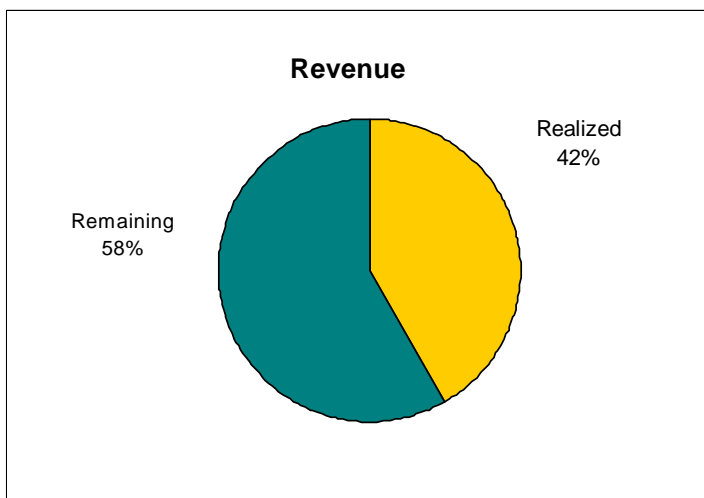
Prof Services	Marin Co. internet support	160.00
ProfServ-CntySalRe	Staff salary	8378.94
Prof Svcs - Other	MT Head - August pump-outs	350.00
Rent	ICB - office rental	420.00
Rent	Libertyship Way - dry storage rental	240.00
Cell Phone	AT &T - mobile phone	74.14
Prof Services	Dave's Diving - raise sunken vessel	690.00
Rent	Schoonmaker Point Marina - slip rental	147.50
Rent	Schoonmaker Point Marina - slip rental	275.00
Prof Services	Fleshman - day labor	200.00
Entertainment	Fed Ex	15.70
Com Srvc - Broadband	AT &T internet	83.77
Com Srvc - Broadband	Earthlink internet	7.90
Printing Supplies	Amazon - Quickbooks	152.97
Printing Supplies	Office Depot - Sears placard	12.47
Printing Supplies	Office Depot - printer ink	83.50
Oth Maintenance	Hirschfeld Engine Repair - patrol boat annual	1000.00
Oth Maintenance	Hirschfeld Engine Repair - patrol boat annual	1000.00
Memberships & Dues	Assoc. of Harbormasters - conference fees	280.00
Prof Services	San Rafael Yacht Harbor - boat disposal	4600.00
HazMat Clean Up	Bay Cities - debris box removal	1014.00
Rent - Equip Rental	Hertz rental - backhoe	538.38
Rent	Schoonmaker Point Marina - slip rental	147.82
Rent	Schoonmaker Point Marina - slip rental	275.00
Rent	Libertyship Way - dry storage rental	240.00
Memberships & Dues	Assoc. of Harbormasters - education fees	200.00
Prof Svcs - Other	MT Head - September pump-outs	350.00
Rent	ICB - office rental	420.00
	total expenditures	56605.61

Percent of Budget and Percent of Year as of September 1, 2011



Expenditures vs. Budgeted Expenditures

Expenditures	\$363,440
Adopted Budget	\$ 66,806



Realized Revenue vs. Budgeted Revenue

Realized Revenue	\$363,589
Budgeted Revenue	\$151,437

RICHARDSON'S BAY REGIONAL AGENCY

RESOLUTION NO. 12-03

RESOLUTION OF THE BOARD OF THE RICHARDSON'S BAY REGIONAL AGENCY AGREEING TO ENTER INTO A CONTRACT WITH THE CALIFORNIA STATE DEPARTMENT OF BOATING AND WATERWAYS

WHEREAS, the Department of Boating and Waterways of the State of California (DBW) has granted funds of \$20,000 in Contract #11-214-524 through their Vessel Turn-In Program), to the Richardson's Bay Regional Agency (RBRA), to be used to remove derelict watercraft from the waters of Richardson's Bay, and

WHEREAS, it is agreed that the RBRA will pay a 10% match (\$2,000) for all invoices related to this work, and

WHEREAS, it is agreed that the RBRA shall submit no invoices for staff time to the DBW.

NOW, THEREFORE BE IT RESOLVED, as follows:

The Board of the Richardson's Bay Regional Agency approves and accepts the 2011/12 AWAFF Contract #11-214-524 with the Department of Boating and Waterways, and that the Harbor Administrator, William Price, is authorized as signatory to represent RBRA in all matters pertaining to the execution of this AWAFF contract.

PASSED AND ADOPTED by the Richardson's Bay Regional Agency, this 15th day of September, 2011.

**Kenneth Wachtel
Board Chair**

ATTEST:

**CLERK OF BOARD
BEN BERTO**

RICHARDSON'S BAY REGIONAL AGENCY

RESOLUTION NO. 12-02

RESOLUTION OF THE BOARD OF THE RICHARDSON'S BAY REGIONAL AGENCY AGREEING TO ENTER INTO A CONTRACT WITH THE CALIFORNIA STATE DEPARTMENT OF BOATING AND WATERWAYS

WHEREAS, the Department of Boating and Waterways of the State of California (DBW) has granted funds of \$91,043 in Contract #11-214-507 through their Abandoned Watercraft Abatement Fund (AWAF), to the Richardson's Bay Regional Agency (RBRA) to be used to remove derelict watercraft from the waters of Richardson's Bay, and

WHEREAS, it is agreed that the will pay a 10% match (\$9104.) for all invoices related to this work, and

WHEREAS, it is agreed that the Richardson's Bay Regional Agency shall submit no invoices for staff time to the DBW.

NOW, THEREFORE BE IT RESOLVED, as follows:

The Board of the Richardson's Bay Regional Agency approves and accepts the 2011/12 AWAF Contract #11-214-507 with the Department of Boating and Waterways, and that the Harbor Administrator, William Price, is authorized as signatory to represent RBRA in all matters pertaining to the execution of this AWAF contract.

PASSED AND ADOPTED by the Richardson's Bay Regional Agency, this 19th day of August, 2011.

**Kenneth Wachtel
Board Chair**

ATTEST:

**CLERK OF BOARD
BEN BERTO**

RICHARDSON'S BAY REGIONAL AGENCY

MEMORANDUM

September 7, 2011

TO: RBRA Board

FROM: Ben Berto, RBRA Clerk

SUBJECT: America's Cup Update

The comment period for public comment on the America's Cup 34 Draft Environmental Impact Report (DEIR) closed on August 25. Consistent with last meeting's report and Board direction, Staff worked with Member Sears to prepare and submit on August 19 a comment letter to the San Francisco Planning Department, lead agency for the project pursuant to the California Environmental Quality Act (CEQA).

The RBRA letter notes that the DEIR did not discuss or address the likely influx of vessels visiting San Francisco Bay for AC34 and anchoring in Richardson's Bay. The DEIR estimates that up to 2,200 boaters will be viewing AC34, although the DEIR 300% range in vessel number estimates indicates that neither the organizers nor anybody else have a good handle on potential vessel numbers. A nearshore America's Cup is without recent precedent.

Richardson's Bay is the best anchorage for the event. It is the only sunny, flatwater, tide- and current-protected anchorage in close proximity to the race course. It seems obvious that there will be substantial volume of boaters visiting for part or all of AC34. Staff estimates that potentially hundreds of AC34-related boaters could anchor in Richardson's Bay. Richardson's Bay could even end up with a fair number of megayachts, particularly given BCDC's recent DEIR rebuff to San Francisco about its proposed "temporary" cityfront megayacht marina (see attached article).

The omission of substantive Richardson's Bay discussion and analysis in the DEIR focuses in Staff's opinion on two AC34-related impacts:

- 1) Wastewater from visiting vessels
- 2) Eelgrass "crop-circle" impacts from visiting vessels

1) Sanitary wastewater is one of the "public service" impacts reported to the Board at the last RBRA meeting in July. Boaters will be using their onboard sanitary facilities for at least some of their sanitation needs. This issue, and the impacts potentially accompanying it in Richardson's Bay, are unmentioned in the DEIR.

Richardson's Bay is a Federally-designated "no discharge zone", meaning that it is illegal to discharge treated or untreated effluent into its waters. The RBRA is under a Total Maximum Daily Load (TMDL) plan imposed by the State Regional Water Quality Control Board. It would be directly at cross-purposes with the no discharge designation, the TMDL, and RBRA's safeguarding of public health and the environment to allow vessel discharge within the confines of Richardson's Bay.

RBRA's DEIR letter points out some means of addressing the sanitary waste issue. Richardson's Bay has pumpout stations at most local docks and marinas, and an anchorage-oriented vessel pumpout program ("MT Head") under the auspices of RBRA that currently serves approximately 250-300 vessels.

As noted in the DEIR letter, "RBRA will need assistance in accommodating any major increase in vessels and their sanitary waste production. Current resources and programs for doing so will need to be substantially expanded." As one related example, RBRA staff has been to over a half-dozen meetings so far concerning AC34 at this early preparation stage. Your RBRA Clerk estimates that AC34-related items have resulted in a recent doubling of his percentage of time spent on the RBRA. If this level of activity continues (which appears likely), the RBRA budget will likely have to be adjusted/increased to pay for additional staff time.

Staff has discussed with Rick Mortimer, the operator of the MT Head vessel pumpout program, how the wastewater program could be ramped up to accommodate an influx of AC34 vessels. Staff is exploring whether it might be possible to (temporarily?) regain possession of the original "MT Head" vessel that was recently turned in to the State when the replacement "MT Head II" vessel was delivered.

Another possibility would be to devise a program to encourage visiting boaters to reserve for pumpout services early so as to minimize the additional problems that will accompany last-minute increased pumpout service requests. Incentives could include discounts for early signup, etc. RBRA believes that, with proper planning and development, a wastewater program oriented around MT Head could largely be self-sufficient since most costs should be borne by visiting boaters.

AC34 organizers/operators could assist RBRA considerably by committing to work directly with RBRA to integrate in program pre-publicity and perhaps requiring AC34-related boaters who will/might anchor in Richardson's Bay to register ahead of time with MT Head for vessel pumpout services.

2) A substantial portion of Richardson's Bay is comprised of thriving eelgrass habitat. Eelgrass areas are important for sediment deposition, for substrate stabilization, as substrate for epiphytic algae and micro-invertebrates, and as nursery grounds for many species of economically important fish and shellfish, including (in Richardson's Bay) herring spawning grounds.

Eelgrass "crop-circles" are caused by anchored boaters' bottom gear rotating in a circle with the tide and wind, in the process scraping off the eelgrass. Aerial photographs of Richardson's Bay document the crop circles created in eelgrass beds by anchored vessels. Some amount of crop-circling can be expected in Richardson's Bay on an ongoing basis. Staff characterizes this as the background level. A large influx of additional vessels visiting for AC34 and dropping anchor in Richardson's Bay could substantially increase the numbers and impacts of eelgrass crop-circles, to the detriment of the eelgrass areas.

It can be reasonably foreseen that vessels will be coming into and out of Richardson's Bay every day of the week immediately before, during, and after the AC34 racing period. Staff believes the RBRA can, with careful, active oversight and management during the

AC34 period, mitigate potential boater anchoring impacts to Richardson's Bay eelgrass beds to less than significant levels. However, doing so will require a substantial increase in the level of on-the-water management, including potential regulations designating and enforcing (eelgrass) areas where anchoring vessels would be discouraged/prohibited from anchoring, and designated temporary anchorage areas.

For example, prudent boaters typically try to avoid anchoring in water depths of 8-10 feet or less (the maximum depth in which eelgrass generally grows). The operable vessels likely to be anchoring in Richardson's Bay for AC34 don't want to get grounded. Boaters typically have charts. However, mistakes occur, some will be unclear on depths (particularly with the substantial tides swings experienced in SF Bay), nighttime anchoring would increase the possibility of straying into the wrong area, etc.

Currently RBRA can only muster an on-the-water presence approximately 4 days a week. The other 3 days Staff is either committed to other shoreside activities or has the two days off. Even on the days when Staff is available on the water, such availability is generally not for the entire workday, and certainly not afterhours.

Efforts directing boater to appropriate anchorage areas will have to take place at many levels, but they must include a seven-day-a-week water patrol to ensure that requirements are fully and consistently communicated and enforced.

RBRA will be participating and cooperating with other agencies, including the Marin County Sheriff's Department, Sausalito Police Department, and the US Coast Guard, in its management and enforcement efforts during the AC34 period. Discussions are already taking place in that regards. However, even if (for example) the US Coast Guard were interested in being more active from a regulatory/enforcement standpoint, recent Richardson's Bay history has demonstrated that USCG does not have shallow water operational capability. There is a likelihood that they would/could not go into shallower eelgrass bed areas where vessels could be causing problems.

Budget impacts

The substantial increase in the number of vessels in Richardson's Bay during the overall AC34 racing period will require thorough pre-planning, and prompt and thorough management, regulatory, and enforcement services. This discussion is part of the pre-planning efforts. However RBRA does not currently have a budget that will support increased water patrol and enforcement. If RBRA is to address boaters' potential impacts in regards to waste disposal and eelgrass, it will need to have additional enforcement capability backed by court action if necessary. An involuntary abatement of one vessel can easily incur expenses in the tens of thousands of dollars, amounts beyond current budgetary capabilities.

RBRA calculated in the AC34 DEIR comment letter the following approximate additional AC34-attributable expenses we will accrue during the AC34 event period in order to address potential AC34 environmental impacts:

2 person patrol x 8 hours/day x 3 days/week	
<u>x 12 weeks x \$100 hour/person</u>	\$57,600
<u>Patrol boat: \$400/day x 3 days/week x 12 weeks</u>	\$14,400
<u>Enforcement/legal</u>	\$50,000
Total	\$124,000

The RBRA Harbor Administrator often conducts solo patrols, but a minimum of a 2 person patrol is much more the norm, and would be expected if we were hiring additional water patrol. The \$124,000 figure attributed to RBRA covering direct AC34-related expenses represents a 55 percent jump over the current total annual level of member jurisdiction contributions to the RBRA (\$228,389 for this fiscal year). 55% is obviously a significant increase, particularly since member jurisdictions (with the potential exception of Sausalito) seem unlikely to experience a commensurate increase in local revenues from AC34 visitors.

RBRA itself has limited ability to recover increased AC34-related costs on its own, with the one exception noted above. Boaters could theoretically be charged the costs of additional pumpout services, which would be structured into the fees charged to boaters for those services. Assuming RBRA's management and regulatory capabilities are supported and enhanced for the event including wastewater efforts, pumpout costs could be recovered from boaters and therefore are not listed as an additional (unreimbursed) expense. The \$124,000 figure above represents additional expenses for which Staff believes RBRA will need financial assistance.

Local agency efforts

Affected Marin agencies have held two AC34-related meetings at the behest of Supervisor (and Boardmember) Sears. At the most recent meeting on August 29 a number of RBRA-related topics were discussed, as follows:

-) RBRA takes over responsibility of waterside issues
-) Further development of the AC34 "People Plan" to include/address RBRA waters
-) Possible development of a reservation system
-) Roles of various enforcement agencies- what is USCG willing to do?
-) Mooring program in conjunction with Sail Sausalito
-) Education/outreach, including development informational flyer/brochure
-) Partnering with water taxi/other concessioners

Sausalito appeared to be particularly in favor of RBRA taking a lead on waterside issues. Staff agrees that RBRA should take a prominent/lead position for directly water-related issues and activities. For example, one of the prominent AC34 needs is for improved water→shoreside access on the Sausalito waterfront, particularly public docks. Grant funding is available from the State for improving docks if Sausalito acts quickly. RBRA Staff is happy and available to provide whatever assistance is needed ensure that this important improvement takes place in a timely manner.

Staff has already discussed the need and desirability for a reservation system in regards to the vessel pumpout program, and is seeking Board direction on how to proceed in that regards. Trying to develop a reservation system and take reservations for hundreds of vessels in what is currently (and likely to continue to be) a relatively unorganized

anchorage presupposes a level of organizational infrastructure that is frankly beyond RBRA's limited capabilities at this time. Staff will contact the US Coast Guard to further explore where and in what manner their resources may be deployed for the event.

The mooring program was discussed at the July RBRA meeting, and absent direction from the Board to pursue this further, staff has not done so at this time. Staff is willing to continue to provide input to Sail Sausalito in their efforts to breathe life into this program, including attending any meeting Sail Sausalito may schedule with BCDC to determine their agency's current position. Staff would continue to represent the Board consensus direction on the mooring program.

Brochures/flyers are an excellent idea which Staff will start working on.

RBRA looks forward to working cooperatively with whatever water taxis and other concessionaires occur with AC34.

As a miscellaneous aside, the Harbormaster is attending an AC34 organizer-convened meeting in San Francisco today (September 8). Staff will try to get some feedback from organizers on RBRA's suggested mitigations, and will report results to your Board.

Conclusions and recommendations

Staff is requesting feedback from the Board on the following areas:

- 1) Are the two AC34 issue areas listed in the DEIR letter adequate, or are there other RBRA issues/topics which should be pursued with AC34 organizers?
- 2) Should staff aggressively pursue development of vessel pumpout capabilities and seek assistance from AC34 organizers within/outside the EIR process?
- 3) Pending AC34 organizers' response to RBRA's AC34 DEIR comments, should preplanning continue for increased vessel anchoring in Richardson's Bay.
- 4) Should Staff try to coordinate with other enforcement agencies to develop agencies' AC34-related roles and responsibilities.
- 5) Should RBRA Staff work on eelgrass mitigation planning regardless of AC34 organizers responses on this issue?
- 6) Should RBRA Staff follow up with Sausalito staff to facilitate dock upgrades?
- 7) Should RBRA Staff cooperate with any Sail Sausalito-led initiative to further the mooring program, including attending a meeting with BCDC if that should be scheduled?

Attachments 1. RBRA letter on AC34 Draft EIR
2. SF Chronicle article 090111

RICHARDSON'S BAY REGIONAL AGENCY

Bill Wycko
San Francisco Planning Department
1650 Mission Street, Ste. 400
San Francisco, CA 94103

August 19, 2011

Subject: The 34th America's Cup Races James Herman Cruise Terminal and Northeast Wharf Project Draft EIR

Dear Mr. Wycko:

I am submitting these comments on the Draft EIR for the for the 34th America's Cup on behalf of the Richardson's Bay Regional Agency (RBRA). The RBRA is a joint powers agency comprised of the County of Marin and the Cities/Towns of Tiburon, Sausalito, Mill Valley, and Belvedere, and is responsible for implementing the Special Area Plan for Richardson's Bay.

RBRA is excited that the City of San Francisco will be hosting the 34th America's Cup (AC34), and looks forward to our involvement with the event. However, AC34 will pose numerous challenges for those involved. Some issues have not been addressed in the DEIR.

RBRA is commenting to assist event organizers and the City of San Francisco in working with the RBRA in clarifying, managing, and reducing potential issues and impacts to manageable levels. To this end, RBRA has identified the following potential concerns (and possible solutions where appropriate):

- 1) A substantial influx of vessels will be visiting Richardson's Bay for a portion or all of AC34. Richardson's Bay is a designated federal anchorage, reflecting its 160+ year history as an active flatwater, wind- and current-sheltered, sunny anchorage for visiting boaters. It is even shown in an AC34 DEIR diagram as an anchorage area.

The DEIR in Table 5.1-2 refers to up to 2,280 spectator boats in the Central Bay on AC34 race days. However the DEIR's estimates range by almost 300 percent, reflecting the difficulty and uncertainty at this time of predicting the disposition and amount of AC34-related boater visitation.

No estimate has been provided in the DEIR of anticipated types, numbers, locations, and duration of vessels visiting and/or anchoring in Richardson's Bay in conjunction with AC34. Absent any such estimates, it is very difficult to anticipate what the accompanying impacts of such vessels might be. Could there be 50-500 additional vessels at anchor in Richardson's Bay during the time of the AC34 races? With

Richardson's Bay's attributes as an ideal anchorage in close proximity to the race course, and the impressive international scale of AC34, it seems reasonably foreseeable that up to several hundred additional vessels over current levels could be anchored in Richardson's Bay for AC34.

- 2) With this influx of an unknown but foreseeably large number of vessels comes a variety of potential impacts. One of these is vessels occupied by boaters for any length of time generate sanitary waste. This issue, and the impacts potentially accompanying it, are unmentioned in the DEIR.

Richardson's Bay is a Federally-designated "no discharge zone", meaning that it is illegal to discharge effluent into its waters. Richardson's Bay is also currently under a Total Maximum Daily Load (TMDL) plan imposed by the State Regional Water Quality Control Board. The purpose of the TMDL is to reduce current water pollutants exceedances to pollutant levels deemed acceptable for shellfish consumption, an almost pristine water quality standard. Richardson's Bay has pumpout stations at several local docks and marinas, and an anchorage-oriented vessel pumpout program ("MT Head") under the auspices of RBRA that currently serves approximately 250-300 vessels.

RBRA will need assistance in accommodating any major increase in vessels and their sanitary waste production. Current resources and programs for doing so will need to be substantially expanded.

DEIR Section 1.4 Areas of Controversy and Issues to be Resolved specifically lists one of these issues as:

Impacts of the AC34 events on views, traffic, services, utilities, recreational resources, and public access at proposed venue locations as well as at adjacent and nearby areas.

DEIR Section 1.4 also states:

Issues to be resolved include those areas of concern that will be addressed either (1) during the permitting and approval processes for the projects subsequent to the completion of the CEQA process, (2) as part of the environmental review requirements under the National Environmental Policy Act (NEPA) for the applicable aspects of the project, (3) during design and implementation of the projects (assuming the projects are approved), or (4) as part of future proposals for long-term development on Port properties as provided for under the Host Agreement and the associated environmental review process.

DEIR Section 1.4 acknowledges that potential impacts to services associated with the project exist but are neither identified nor mitigated. RBRA is detailing potential

impacts, and suggesting mitigations. RBRA expects that the AC34 FEIR will recognize, fully plan for, and assist RBRA in accommodating the financial impacts of program expansions necessary to address these impacts.

- 3) A substantial portion of Richardson's Bay is comprised of thriving eelgrass habitat. Eelgrass areas are important for sediment deposition, for substrate stabilization, as substrate for epiphytic algae and micro-invertebrates, and as nursery grounds for many species of economically important fish and shellfish, including (in Richardson's Bay) herring spawning grounds.

Aerial photographs document the "crop circle" impacts created in eelgrass beds by vessels' anchor chains. While certain levels of existing "crop-circling" can be expected now and in the future (including during the AC34 period) from ongoing numbers of anchored vessels, a large influx of additional vessels visiting for AC34 and dropping anchor in Richardson's Bay could substantially increase the numbers and impacts of "crop-circles", to the detriment of eelgrass areas.

RBRA believes it can, with careful, active oversight and management during the AC34 period, mitigate potential impacts to Richardson's Bay eelgrass beds to less than significant levels. Doing so will require a substantial increase in the level of regulatory involvement in designating and enforcing temporary anchorage areas and areas where anchoring vessels will be discouraged/prohibited from anchoring. Currently RBRA lacks an on-the-water presence for 3 days/week, personnel being fully committed to other activities. It can be reasonably foreseen that vessels will be coming into and out of Richardson's Bay every day of the week during (and immediately before and after) the AC34 racing period. Efforts directing boater anchorage areas will have to take place at many levels, but include a seven-day-a-week water patrol to ensure that requirements are communicated and enforced.

RBRA will be participating and cooperating with other agencies, including the Marin County Sheriff's Department, Sausalito Police Department, and the US Coast Guard, in its management and enforcement efforts during the AC34 period. Discussions are already taking place in that regards. However, even if the US Coast Guard were interested in asserting more regulatory authority, recent history has demonstrated that they do not have shallow water operational capability. There is a good chance that they would or could not go into shallower areas where vessels would be causing problems (for example, to eelgrass beds).

A substantial increase in the number of vessels in Richardson's Bay will demand prompt, thorough regulatory and enforcement services. Currently RBRA does not have a budget that will accommodate enhanced water patrol and court costs. If RBRA is to regulate boaters in regards to waste disposal and anchoring locations, it will need to have additional enforcement capability backed by court action if necessary. For example, abatement of one vessel can easily incur expenses in the tens of thousands of dollars.

RBRA calculates that the following approximate additional AC34-attributable expenses are likely during the AC34 event period:

2 person patrol x 8 hours/day x 3 days/week	
<u>x 12 weeks x \$100 hour/person</u>	\$57,600
<u>Patrol boat: \$400/day x 3 days/week x 12 weeks</u>	\$14,400
<u>Enforcement/legal</u>	\$50,000
Total	\$124,000

The total annual level of contributions from local jurisdictions to the RBRA approximates the above AC34 expense figure - addressing AC34 financial costs will come close to doubling local expenses. RBRA has scant opportunity to recover costs from the boaters, with one exception: the direct expense of the additional pumpout services could be structured into the fees charged to boaters for those services. Assuming RBRA's enhanced management and regulatory capabilities are supported and developed, pumpout costs could be recovered from boaters and therefore are not listed as an additional (unreimbursed) expense. The \$124,000 figure above represents additional expenses for which RBRA will need financial assistance.

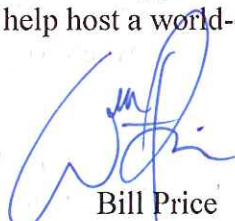
It should be noted that the RBRA is focused on potential waterside effects associated with increased AC34-related boater visitation. However, if the course boundaries listed in DEIR Figure 1-1 continue as the official course area outline, a major influx of spectators can be anticipated on proximate Marin landside viewing areas (for example, Marin headlands). Marin headlands is identified as a "secondary viewing area" in the DEIR, in which Table 5.1-1 anticipates that up to 3,500 spectators might use this informal viewing area. Given the stature of and likely interest in the race, there could be many more spectators in this area. Staff is aware of plans in progress to tighten up the race course area to a long rectangle oriented much closer to San Francisco city side of the Bay than Figure 1-1. Such a course reduction would reduce the potential number of spectators (and associated impacts) on the Marin landside. RBRA leaves it to other jurisdictions and agencies to comment on issues associated with landside visitors.

RBRA looks forward to ongoing discussions and cooperation with AC34 organizers and sponsors as we move ahead with this project and closer to 2013. Provided that the Final EIR responds to and mitigates impacts identified in this letter, and AC34 organizers and project sponsors coordinate with and support RBRA in this regard, we look forward to successfully doing our part to help host a world-class AC34 on San Francisco Bay.

Sincerely,



Ben Berto
RBRA Clerk



Bill Price
RBRA Harbor Administrator

CC: RBRA Board



An illustration from the draft environmental impact report depicts proposed berthing facilities for America's Cup spectators' yachts between Piers 14 and 22 1/2.

Message to America's Cup: Don't steal our bay

John King, Chronicle Urban Design Critic

Thursday, September 1, 2011

San Francisco -- The agency that guards our bay has a message for America's Cup organizers who want to park two dozen "superyachts" along Rincon Park on San Francisco's waterfront in 2013: not so fast.

"Filling this basin with large yachts ... would significantly impact the public's ability to enjoy the bay," reads the official response by the state's Bay Conservation and Development Commission to the draft environmental impact report for the fabled regatta. The comment period on the report closed on Aug. 25.

The letter also describes "this special place along the San Francisco waterfront" as the only downtown stretch that combines "space for play, quiet contemplation, viewing the bay and other activities."

These are strong words from the agency with final say over an event expected to attract more than 200,000 people a day to watch catamarans slice across the bay.

They're also a powerful reason for city leaders and the organizers of the 34th America's Cup to fine-tune the plans now in the works - before support for the entire event is threatened.

The fate of the open water at Rincon Park has emerged as a flash point because the plan, as it now stands, sacrifices the park's spacious vistas to create a sort of private lagoon for people on yachts ranging in size from 100 to 265 feet.

These aren't the vessels that would launch from the America's Cup Village at Pier 27 on race days and be based at Piers 30-32 in between. Instead, the quarter-mile of open harbor between Piers 14 and 22 1/2 would be reserved for yachts too big to fit into existing city marinas.

The result could be a floating white wall on non-race days during the 2013 America's Cup; the docking plan in the draft environmental report shows the yachts berthed with their sterns facing shore. Since the largest superyachts can reach 40 feet in width and height, these are not diminutive derrieres.

But wait, there's more

The agreement between the city and the America's Cup Event Authority also gives the authority the right to develop the basin as a recreational marina if the temporary berths require dredging. The draft environment report takes dredging as a given, and estimates the now-open basin could hold 425 sailboat slips post-Cup.

All this runs counter to a 2000 agreement between the BCDC and the Port of San Francisco regarding the waterfront from China Basin north to Pier 35. In it, the two agencies agree to designate four "open water basins" as part of overall public access to the bay. Rincon Point, part of the park between Piers 14 and 22 1/2, has the strongest protections of the four because its curved shoreline allows unique perspectives on both the skyline and the Bay Bridge.

That was then. And now?

The BCDC - which must approve any revisions to the 2000 agreement - states in its Aug. 25 letter that changes to the current rules hinge on Cup organizers "eliminating or reducing the number of private, spectator yachts in the Rincon Point Open Water Basin." The agency then suggests other spots where big boats could be moored. The open basin at the foot of Broadway is one possibility, as is the area around the Agricultural Building north of Pier 14. A handful of yachts could berth along the north edge of Rincon Point basin, so long as they're not directly in front of the park.

All this is in addition to space the plan also earmarks for superyacht berths, such as one side of Pier 27 at America's Cup Village. Regulators are comfortable with that location, since that's where the action will be.

True access for all

In other words, the BCDC isn't out to kill the fun. As its letter states, "The AC34 events are expected to be wonderful for people to see and enjoy." Nor is this a class issue, as some event supporters suggest. If it was, the bid to host the Cup wouldn't have won a unanimous vote of support from the city's Board of Supervisors.

The only comment from America's Cup officials this week was a statement from chief operating officer Tom Huston that "we believe that the public process will make for a better event" and that the authority will use the 2,200 pages of comments (!) to the draft report in "working toward plans that respect our neighbors and mitigate our impact."

Let's hope so, starting with the end of any push for a commercial marina at Rincon Point.

Volume of comments aside, there's a sense that all but the most ardent environmentalists and spiteful obstructionists want to see the Cup take place. The issue is balance.

Even if America's Cup is the city's main attraction in the summer of 2013, it shouldn't have the entire waterfront to itself. Many of us will be enjoying the spectacle. Other people will want to enjoy the bay without a fuss. They have that right, too.

Richardson's Bay Regional Agency and County of Marin Houseboat Marina Program

Background

There are approximately 420 houseboat residences (floating homes) in the unincorporated area of the County of Marin just north of the Sausalito city limits. They are docked at four marinas that are separately owned, operated and maintained. The marinas with the number of docks, houseboats, and pump/lift stations are listed below:

• Commodore	1 dock	11 houseboats	1 pump/lift station
• Kappas	3 docks	117 houseboats	2 pump/lift stations
• Waldo Point	6 docks	270 houseboats	4 pump/lift stations
• Yellow Ferry	1 dock	22 houseboats	1 pump/lift station
• TOTALS	11 docks	420 houseboats	8 pump/lift stations

The four marinas are comprised of eleven individual docks. Nine of the eleven docks are on pilings and fixed, therefore not subject to tidal influence. Two of the eleven docks, Commodore (11 houseboat residences) and Waldo Point “the Gates” (37 houseboat residences), are floating docks subject to tidal actions. Waldo Point the Gates is currently in design review with a planned total rebuild as a fixed pier.

Each marina provides sewerage, potable water, gas, electric, cable TV/computer, telephone and fire suppression service to the houseboat residences in much the same way as is provided to land side residences. There are significant differences in the sewage collection system for the houseboat communities compared to land based systems.

1. The collection systems are suspended beneath the dock/pier and are exposed, easily accessible, and generally visible from the houseboat to where the system goes underground at the transition to shoreline.
2. The collection system for the houseboat communities from the point of discharge at the houseboat to entry into the underground pump stations are under pressure created by the ejector and grinder pumps used to pump wastewater from each individual houseboat.

Houseboat Marina Sewage Collection System Design Components

Each floating home has a fully enclosed holding tank with an ejector or grinder pump within the tank to deliver the houseboat's wastewater up to the main sewer line which is suspended under the dock. The holding tank and ejector/grinder pump configurations are either mounted on the inside or outside of the floating home hull. The mounting of holding tanks and ejector pumps appears to be evenly distributed on the inside and outside of the houseboat hull throughout the marinas.

Wastewater delivery from the houseboat to the dock main is accomplished through a flexible 1½” to 2” hose termed a “lateral”. This lateral connects the houseboat wastewater holding tank to the main sewer line. The lateral is suspended between the holding tank and the dock sewer main and allows for houseboat movement due to tidal action. Where there is a fixed pier, the laterals generally are hung such that they are completely out of the water at low tide, and

partially submerged during high tides. The laterals for the two floating docks are generally submerged at all times except for the two connecting ends.

There are two check valves between each houseboat ejector pump and dock main line to prevent wastewater from flowing back to the houseboat when the ejector pump has stopped pumping. One check valve is located at the ejector pump and one check valve is located where the lateral enters the main sewer line under the dock.

The sewer main of the sewage collection system is PVC pipe suspended beneath the main dock above the water. The sizing of the main line is based on the length of run of the main as well as the number of houseboats connected. For example, Waldo Point has one main that increases in diameter from 2" to 2 1/2" to 3" to 4" before reaching shore.

The sewer mains proceed underground upon reaching shore and terminate at pump stations. These stations have two pumps (generally 5 horsepower each) which alternate duty via float switches in the tank. There are audible and/or visual malfunction alerts for both high and low water conditions in the holding tanks. If one pump fails, the other pump assumes total duty and the alarms are activated. In the event both pumps fail, there is an overflow tank that provides emergency capacity. If repairs cannot be made quickly and overflows are imminent, the holding tanks can be manually pumped by a service provider.

Sewage from the houseboat marina pump/lift stations is pumped directly to the Sausalito - Marin City Sanitation District's (SMCSD) sewage collection system. Sewage collection, treatment and disposal are provided by SMCSD.

The maintenance and operation of the system components as well as wastewater management from the houseboat to the marina dock sewer main are the responsibility of the houseboat owner. The responsibility for the maintenance and operation of the sewer main from the dock to and including the pump/lift stations is that of the marina owner. The sewage collection system beyond the marina pump/lift stations is the responsibility of SMCSD.

Houseboat Marina Sewage Collection System Procedures

The four houseboat marina collection systems are all very similar in design. As a result, the approach taken by marina operators for sewage collection system oversight, management and maintenance are essentially the same.

All system lines are under some pressure at all times. This makes detection of any leaks or compromises in the system easily recognized both visually and audibly by anyone in reasonably close proximity.

Preventative inspections tend to be minimal due to the close proximity of full time residents and ease of problem detection. Because the underside of the marina piers also carries fire suppression, gas, electrical, water, cable TV, and telephone lines, there is frequent work under the dock with opportunity to observe the sewage collection system. Additionally, there are annual inspections required of both the gas lines as well as the fire suppression system. Marina

staff participates in these inspections which provide opportunities to visually survey the sewage disposal network.

In the event a component belonging to a homeowner fails, the homeowner is notified to arrange for immediate repairs. Water supply is turned off to the houseboat and actions necessary to prevent and eliminate effluent flow into the bay are taken immediately. If the resident is out of town or the item in need of repair is difficult to access by boat, the marina staff will at a minimum turn off water to the houseboat to ensure there is no leakage into the bay. In some cases marina staff will perform the repair and bill the homeowner.

A written maintenance log is maintained by the marina maintenance personnel to track any known repair to any component of sewer related infrastructure whether performed by a homeowner, marina maintenance staff or outside contractors.

The marina pump/lift stations have regularly scheduled preventative maintenance and any necessary repairs by a plumbing contractor. Each marina maintains parts and supplies on-site to handle the majority potential failures. Again, any system related repairs that are performed are logged.

Observations

The majority of the sewage collection system is entirely above water, suspended beneath the piers and therefore exposed and easily accessible. On the stationary fixed piers, it is only the laterals from the main line to the houseboat that dip below the water level as tidal cycles to high tide. The sewer laterals from the houseboat home to the main are suspended so they are out of the water during low tides. Laterals that connect a houseboat to a floating dock main line tend to be submerged at all times. In these cases the connections to the houseboat holding tank and the dock main are above the water level. In all circumstances, the systems are accessible, and generally visible from the houseboat to where the sewer main goes underground at the transition to shore.

The systems are under pressure and suspended above the water making detection of any leaks or compromises in the system easily recognized both visually and audibly. Houseboat residents interviewed said that they are very aware of unusual dripping or hissing sounds that might indicate a leak. They also said they can smell the sewage if there is a leak. The residents access their homes by walking in close proximity to (sometimes directly above) the sewage collection lines which can be perceived to be to a passive inspection.

Most of the daily sewer system use is conducted during two time periods. Waldo Points pump stations records show that 80% of pumping occurs from 7 am to 10 am, and 18% occurs from 5 pm to 7 pm. These are times when it would be expected that there would also be more resident activity on the docks.

There are three major storm water outfalls in the area of the four houseboat marinas. From south to north they are:

- 48” outfall at Waldo Point “C” Dock
- Drainage channel at Kappas Gate 6 ½ - this channel connects with a pond west of Highway 101 next to the Marin City Shopping Center
- Drainage channel north of Commodore located east of Highway 101 at the intersection at Highway 1.

It is unclear at this time if there is a regular water flow from these locations throughout the year. Additionally, there is a 6’X6’ vault just south of Waldo Point “E” Dock at the city limits of Sausalito. Waldo Point staff believes this is also some sort of storm drain facility. There are also numerous small drainage features in the parking areas along the length of the houseboat marina properties.

It is almost certain that the discharge from the three major storm water outfalls must impact water quality during rain events. These outfalls may also contribute throughout the year depending on flow and watershed water quality. The water quality at these outfalls should be assessed through water testing throughout the year.

Recommendations

Overall, current oversight and response practices are good and relatively consistent throughout the houseboat communities. However, additional community education providing a higher level of community awareness along with more active community participation would provide for a more comprehensive and responsive program. Additionally, a few collection system design and configuration changes would provide for a more visible system for easier inspection and leak detection with less exposure to possible failures. Following are the recommended program elements:

Inspection

- Encourage harbormasters to schedule regular inspections of their dock’s sewage collection system. The mainline sewage tank and pump should be visually inspected, cleaned, and repaired (as necessary) annually. Records of the inspections, findings and action should be maintained, and submitted annually to RBRA/County EHS.
- Encourage dock residents to promptly report leaks to harbormasters. RBRA/County EHS will assist in the event of a delay in response/resolution.
- Sewage collection system inspections should be performed after earthquake/tsunami events as these tend to affect the integrity of the joints.
- Record inspections and document leaks//repairs/other issues in incident reports. Include in annual report to RBRA/County EHS.
- A complete system evaluation should be performed as part of a houseboat marina Use Permit renewal, to assess the integrity of the system components. This should include any system components from the houseboat hull to the shore side pump stations.
- External ejector or grinder pump configurations (those mounted on the outside of the houseboat hull) should be inspected periodically for integrity. Frequency of inspection should be determined based on previously demonstrated durability.

Collection System Design and Configuration

- All ejector or grinder pumps and holding tanks should be moved inside the hull of the houseboat if possible. This should always occur at time of re-hull. Currently about 95% are stationed inside the hull of the houseboat.
- The flexible hoses utilized for the laterals from the houseboat to dock transition should be scheduled for replacement on a periodic basis based on reasonable life expectancy considering the demands of the environment.
- Houseboats that require bilge pumps due to leaking hulls or water infiltration from rain shall configure those pumps to send their effluent directly to the ejector pump holding tank. The practice of purging bilge directly to the bay shall be discontinued. Houseboats with bilge pumps are not typical as most do not require them.
- All hard plumbing (holding tanks and hard piping) associated with the houseboat should be maintained completely above the water line at all times.

Information Dissemination

- Work in conjunction with Harbormasters and Floating Homes Association (FHA) to disseminate information concerning the Houseboat Marina Inspection Program to all houseboat residents. An annual issue of the Floating Times (scheduled for printing in February 2012) should:
 - Outline best management practices for individual, onboard sewage systems,
 - Provide a phone tree for sewage emergencies specific to each marina and/or dock,
 - Describe the signs to look for when a leak is suspected.

Recommendations for responsible agencies

Storm Drain and Water Runoff

- Identify all major runoff discharge locations and test water quality regularly at different times of the year.
- Identify all localized area drainage facilities (shore side parking lots, etc.) and assess their impact on water quality.
- Based on findings, consider corrective actions to mitigate any negative impacts.

Submitted by:
Robert Turner
County of Marin
Environmental Health Services Project Manager

Enclosures:

Commodore Marina Sewer System (system description and marina management protocol)
Richardson Bay & Kappas Houseboat Marina (system description and marina management protocol)
City of Sausalito Sewer Ejection Systems – Yearly Maintenance Program
Sewage Ejector Pump information
County Code
Dock List (AP #'s & Addresses)
Aerial Photos (details include Dock Names, Pump Station & Storm Water Outfall locations)