

RICHARDSON'S BAY REGIONAL AGENCY

Thursday, November 21, 2013

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 August 15, 2013 Meeting
2. Review report of Harbor Administrator
3. Approval of prior expenditures for September - November 2013
4. Review of legal issues in Richardson's Bay
registration enforcement
5. Water Quality test results
6. Public comments invited concerning items NOT on this Agenda (3-minute limit)
7. Staff comments
8. Board member matters

NEXT MEETING: Tentatively planned for January 16, 2014. Board members please review your calendars and advise Staff as to your availability.

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

RICHARDSON'S BAY REGIONAL AGENCY

MEMORANDUM

November 15, 2013

TO: RBRA Board

FROM: Ben Berto, RBRA Clerk

SUBJECT: November meeting

Board members:

A majority of the Board responded earlier that they would be able to attend this November (versus October) meeting date. This meeting features a fairly light agenda. Staff and the legal ad hoc subcommittee met and discussed options on anchorage-related issues. A brief status update is included.

Ongoing efforts to address derelict/sunken vessels in the Bay and elsewhere continue to be newsworthy (see attached article). The multi-million dollar price tag proves once again the "stitch in time" adage. Much more seriously, Typhoon Haiyan in the Philippines demonstrated the awesome, devastating power nature can unleash in a dynamic maritime environment. Before-and-after aerial images of Tacloban City shows perhaps a 500-foot wide swath of over-water development and vessels was violently destroyed and scattered landward by the typhoon. A sobering example of what occurs when unfettered development encounters irresistible forces of nature.

On a more positive note, another news article details the robust reintroduction/recovery of native Olympia oysters in an artificial reef developed in San Rafael near the Richmond Bridge (see attached). Good news for the environment, although staff disputes some of the historical facts cited in the article. In fact, Olympia oysters virtually disappeared from San Francisco Bay several thousand years ago. Midden studies document that local native Americans diets shifted from oysters to clams in response to shifts in the SF Bay bottom from hard surfaces to mudflats long before Europeans arrived. Oysters used for the commercial market in the SF Bay region were either native Olympia oysters imported from Washington State (hence the common name), or Eastern oysters (locally renamed Pacific oysters) imported by railcar from the east coast and grown in Richardson's Bay and elsewhere in SF Bay until the early 1900's.

Our latest round of water quality test results indicate that the water in Richardson's Bay is very good (see attached).

Staff looks forward to seeing Boardmembers as we approach the holiday season.

RICHARDSON'S BAY REGIONAL AGENCY

MINUTES OF AUGUST 15, 2013

HELD AT SAUSALITO CITY HALL CHAMBERS

MEMBERS PRESENT: Kate Sears (Marin County); Ken Wachtel; (Mill Valley); Herb Weiner (Sausalito); Emmett O'Donnell (Tiburon)

ABSENT: Thomas Cromwell (Belvedere)

STAFF: Bill Price (Harbor Administrator); Ben Berto (RBRA Clerk); Jenna Brady (County Counsel)

Meeting called to order at 5:39 PM

Minutes of May 28 special budget meeting (carried over) and June 20, 2013

Minutes were approved.

Review report of Harbor Administrator

Mr. Price reported on a houseboat marina sewage spill that had occurred at the Waldo Point parking lot during their parking lot re-build. A small amount flowed into the bay. The shoreline and Gates reconfiguration is on schedule.

He explained that there was a miniscule amount of VTIP allocated to RBRA this year due to reduced overall funding, an upsurge in applicants, and resulting additional competing demands for funding. The VTIP has been fully re-funded for next year. He will apply for a new boat grant in 2014 through Division of Boating, since the current patrol vessel is in its 11th year of service.

Prior expenditures

The expenditure report was accepted unanimously.

Review of legal issues on Richardson's Bay

Mr. Berto introduced Attorney Clem Shute, who was instrumental in the development of the Special Area Plan, and has been brought in to provide a clear framework for the RBRA to move forward. Mr. Shute started the discussion by saying the ordinances were written in 1991 and deserve a closer look. He said that historically all lands in the Richardson's Bay were under State grant, with some areas granted to local jurisdictions to administer as if they were arms of the State. Residential use is illegal under the public trust doctrines according to the State Lands Commission, the Attorney General, and BCDC. This is a complicated issue that isn't going away. He believed there could be a way to accommodate the anchor-outs, but a challenge is how to structure residential use consistent with the public trust. One step could be a virtual fence to halt the ongoing influx. Member Wachtel asked if all the boats were in violation of a land grant and Shute replied that they were in violation of the State constitution. Supervisor Sears questioned ways to improve enforcement capabilities, particularly the endless backfilling of boats. Mr. Shute said that an ordinance could be drafted to set an "as of this date" no additional

vessels with time limits, such as what was explored four years ago. It would be controversial. Member Wachtel asked if we had considered a large vessel ordinance. Mr. Berto responded that RBRA had explored the possibility but had tabled it in the face of legal challenges. Mr. Shute suggested any ordinance be one the Board felt comfortable defending. Chair Sears about protecting eelgrass, and Mr. Shute responded that he doubted that the JPA agreement would need to be changed to do so. Member Wachtel stated that he believed we had or could get the enforcement authority, but we lack ability to carry out enforcement.

David Lay said that eelgrass was not an issue if you anchored correctly, and that it would be very difficult to tell people to “just move along”. Nathan Archer said that the eelgrass beds increase in size corresponding to sewage spills, and said that attempts to regulate the bay put the cities and county in danger of a lawsuit. Scott Diamond said that eelgrass was causing increased siltation in bay and was a problem for navigation. He also said that yacht harbors were boat parking lots for the rich, and there should be allowances for low-income boaters, such as rent control.

Doug Storms said that there needed to be a workshop with more focus on certifying ground tackle and seaworthiness of vessels on the Bay. Phil McGovern said as long as there is a bay, there will be boats.

Chair Sears brought the discussion back around, thanking the public for their input and saying that this legal discussion was the first step in the process to clean up debris and abandoned boats. A vessel census was another step, particularly for abandoned vessels. The focus of the RBRA was to protect the bay, clean up the environment and maintain safety, and what changes are necessary to achieve that. Chair Sears suggested moving forward on the legal framework and pursue funding and collaboration.

Member Wachtel asked for a sub-committee to be appointed to work with Staff. Priorities need to be set, but cannot be developed by the Board beyond broad brush. Member Weiner sought a public workshop to work hand in hand with the community. Chair Sears called for Members Wachtel and O’Donnell to serve on the subcommittee, and she liked the idea of a workshop to be arranged a later date. Mr. Berto concluded by stating that anchor-out vessels are part of the local culture and both sides need to bring mutual understanding of issues to the workshop forum.

Public Comments

None

Staff Comments

None

Board Member Matters

Member Wachtel said that he would be unable to attend the October 17th meeting.

The meeting was adjourned to closed session at 6:47 PM.

NOTE: The next meeting of the RBRA is tentatively scheduled for **November 21, 2013 at 5:30 PM** at the Sausalito City Hall Chambers.

RICHARDSON'S BAY REGIONAL AGENCY

HARBOR ADMINISTRATOR'S REPORT

November 15, 2013

WORKING RELATIONSHIPS

- **Boating and Waterways** – working to develop and support both the AWAFF and VTIP programs through outreach to local jurisdictions and direct contact with Division of Boating staff.
- **Cal Recycle** – Processing reimbursement request for our third round of vessels disposed under the terms of this grant. Amount of request is approx. \$70K for 30 boats.
- **Corps of Engineers** – tightening up our already rigorous standard operating procedures in light of the State Water Board's new interest in Clean Salvage Operations.
- **Coast Guard** – meeting with the Abandoned Vessel Group to develop a bay-wide tracking mechanism for problem vessels.

DEBRIS REMOVAL

- Disposed of 24 vessels. 7 vessels are currently awaiting demolition.
- In coordination with City of Sausalito public works and US Army Corps of Engineers, Cass Gidley Marina derelict docks are being disposed and renewed with Oracle America's Cup docks.
- 3 boats are currently impounded.

RAPID RESPONSE

- Recovered 4 vessels from Belvedere shoreline.

WATER QUALITY

- Completed the 2013 Fall Dry Weather testing cycle. Test results attached.
- Working diligently with State Water Board, CalRecycle and Division of Boating to develop Best Management Practices (BMP) for salvage operators in California. This will meet Water Board water quality goals and avoid a permit per boat scenario that the Water Board originally proposed.
- Division of Boating / EPA reimbursed RBRA for major engine overhaul on the Waste Aweigh.

OTHER

- Conducted on-the-water anchorage inspection tours for RBRA Chair Sears and Member O'Donnell. Additional tours to be arranged for remaining Boardmembers.
- Put together the annual Conference and Trade Show for the California Harbor Masters and Port Captains.

RBRA-FY 2013/14 - August 10 - November 14, 2013 BALANCE SHEET

COST CENTER	DESCRIPTION	REVENUES
Bldgs & Grounds Rent	Mooring rent	-100.00
Bldgs & Grounds Rent	Mooring rent	-150.00
Bldgs & Grounds Rent	Mooring rent	-150.00
Bldgs & Grounds Rent	Mooring rent	-150.00
Int on Pooled Invst	Interest 1st quarter	-68.43
Bldgs & Grounds Rent	Mooring rent	-150.00
Bldgs & Grounds Rent	Mooring rent	-150.00
Bldgs & Grounds Rent	Mooring rent	-150.00
Bldgs & Grounds Rent	Mooring rent	-600.00
Bldgs & Grounds Rent	Mooring rent	-150.00
Bldgs & Grounds Rent	Mooring rent	-150.00
Sales and Services	Sausalito PD - boat share	-908.66
State - Grant	EPA - Pump-out grant reimburse	-5,592.11
	Revenue totals	-8,469.20

		EXPENSES
Prof Svcs - Other	Midas - annual County web services	160.00
Rent - Off Space	ICB - office rental	420.00
Com Srvc - Cell Phon	AT & T - mobile phone	83.19
HazMat Clean Up	Bay Cities - debris removal	435.20
Rent - Equip Rental	Hertz - Backhoe rental	512.57
Prof Svcs - Other	Alexander - web services	260.00
Prof Svcs - Other	Day Labor	50.00
HazMat Clean Up	HMA - Asbestos inspection	350.00
Prof Svcs - Other	Diego Truck - towing fees	400.00
Rent - Equip Rental	Hertz - Backhoe rental	767.11
HazMat Clean Up	Redwood Landfill - dispose of boats	408.30
Com Srvc - Broadband	AT&T - internet	40.00
Com Srvc - Broadband	AT&T - phone line	44.65
Trav-Meals	Lunch w/ Division of Boating	32.41
Trav-Meals	Coffe w/ SPD	14.25
Trav - Parking	Parking - sacramento	15.75
Trav - Other	Bridge toll - BCDC	6.00
Postage	USPS - stamps	9.20
Oth Maintenance	Jackson's Hardware - chainsaw	35.00
Oil & Gas Outside	Chevron - patrol boat fuel	96.96
Prof Svcs - Other	SR Yacht Harbor - tow and demo	9,000.00
Prof Svcs - Other	SR Yacht Harbor - tow and demo	4,500.00
HazMat Clean Up	Bay Cities - debris removal	348.80
Prof Svcs - Other	Day Labor	100.00
Rent - Off Space	Schoonmaker - slip fees	160.00
Rent - Off Space	Schoonmaker - slip fees	243.00
Rent - Off Space	Libertyship - dry storage	240.00
Maint & Repair	Hirschfeld Yacht - engine repair	240.00
Maint & Repair	Hirschfeld Yacht - engine repair	4,858.74
Prof Svcs - Other	Day Labor	150.00
Rent - Off Space	ICB - office rental	420.00
Memberships & Dues	CA Harbormasters - Training Conference	325.00
ProfServ-CntySalRe	Salary and benefits	16,387.58
Prof Svcs - Other	MT Head - pump-out services	325.00
Com Srvc - Cell Phon	AT & T - mobile phone	183.02
Prof Svcs - Legal	Shute - legal counsel	1,530.00
Ins - Gen Liability	Alliant insurance - SLIP policy	15,179.00
HazMat Clean Up	HMA - Asbestos inspection	600.00
Prof Svcs - Other	Day Labor	187.50
Rent - Equip Rental	Hertz - Backhoe rental	419.91
Prof Svcs - Other	Dave's Diving - raise sunken boat	2,245.00
Rent - Off Space	Schoonmaker - slip fees	411.00

Prof Svcs - Other	Wedlock - survey	235.00
Prof Svcs - Other	Day Labor	275.00
Prof Svcs - Other	Diego Truck - towing fees	300.00
HazMat Clean Up	HMA - Asbestos inspection	1,165.00
HazMat Clean Up	Bay Cities - debris removal	1,389.07
Com Svcs - Broadband	AT&T - internet	40.00
Com Svcs - Broadband	AT&T - phone line	45.16
Trav-Hotel Lodging	Seascape Apts - conference lodging	374.74
Trav-Meals	Saylor's crew lunch	24.62
Postage	Fed Ex	13.35
Oth Maintenance	Water Street - saw blades	31.45
Oth Maintenance	Jackson's - chainsaw + tools	167.72
Oil & Gas Outside	Chevron - patrol boat fuel	89.00
Rent - Off Space	Libertyship - dry storage	240.00
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Prof Svcs - Other	Day Labor	275.00
HazMat Clean Up	PALS - asbestos removal	600.00
ProfServ-CntySalRe	Salary and benefits	10,925.05
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Laboratory Services	Solano Co. Labs - Fall H2O tests	2,160.00
Prof Svcs - Other	Diego Truck - towing fees	450.00
HazMat Clean Up	Bay Cities - debris removal	900.30
Prof Svcs - Other	Day Labor	125.00
Prof Svcs - Other	Dave's Diving - raise sunken boat	1,225.00
Prof Svcs - Other	Day Labor	200.00
Publicat & Legal Not	Marin IJ - legal ad	862.48
Office Supplies	MS Office suite - update software	139.99
HazMat Clean Up	HMA - Asbestos inspection	580.00
Prof Svcs - Other	Wedlock - survey	235.00
Prof Svcs - Other	Day Labor	200.00
Prof Svcs - Other	Parker Diving - raise sunken boat	1,950.00
Prof Svcs - Other	SR Yacht Harbor - tow and demo	4,500.00
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Prof Svcs - Other	Diego Truck - towing fees	450.00
Rent - Equip Rental	Hertz - Backhoe rental	419.91
Prof Svcs - Other	A&S Environmental - oil recycling	689.50
HazMat Clean Up	Bay Cities - debris removal	845.35
HazMat Clean Up	HMA - Asbestos inspection	935.00
HazMat Clean Up	PALS - asbestos removal	600.00
Prof Svcs - Other	Day Labor	162.50
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Reprographic Svcs	Business cards - COM	55.00
Prof Svcs - Other	MT Head - pump-out services	350.00
Rent - Off Space	ICB - office rental	420.00
Prof Svcs - Other	Day Labor	125.00
HazMat Clean Up	HMA - Asbestos inspection	920.00
	Expenses	110,136.21

Richardson Bay Regional Agency

Vessel Disposal List August - November 2013

Date	Name	Type	Amount
8/23/2013	Nemesis	54' wooden powerboat	10200.00 abandoned - CalRecycle
8/23/2013	Mischief	38' wooden powerboat	4850.00 abandoned - CalRecycle
9/14/2013	Arenacraft	20' F/G powerboat	81.45 abandoned - CalRecycle
9/14/2013	Cat Bellaire	27' F/G sailboat	1830.07 abandoned - CalRecycle
9/14/2013	Aqualift	20' F/G powerboat	419.91 abandoned - CalRecycle
9/14/2013	Tanzer 22	22' F/G sailboat	600.00 abandoned - CalRecycle
9/14/2013	Viking 27	27' F/G powerboat	187.50 abandoned - CalRecycle
10/3/2013	Fiberform	22' F/G powerboat	200.00 abandoned - CalRecycle
9/21/2013	Talofa	40' wood sailboat	5278.87 sunk - abandoned - CalRecycle
9/21/2013	Astraea	30' F/G sailboat	800.00 abandoned - Waldo Point
9/28/2013	Basta Skiff	16' F/G powerboat	200.00 abandoned - CalRecycle
9/28/2013	Circe V	25' F/G sailboat	1,068.83 abandoned - CalRecycle
9/28/2013	Catalina 25	25' F/G sailboat	728.20 abandoned - CalRecycle
10/1/2013	Showgirl	35' wooden powerboat	6265.00 sunk - abandoned - CalRecycle
10/3/2013	Misty	28' F/G powerboat	175.00 abandoned - CalRecycle
10/12/2013	Brightside	38' F/G houseboat	2844.91 sunk - abandoned - CalRecycle
10/12/2013	Lorilee II	26' F/G powerboat	870.35 abandoned - CalRecycle
10/12/2013	Islander Nunzio	24' F/G sailboat	200.00 abandoned - Waldo Point
10/12/2013	Reinell	18' F/G powerboat	500.00 abandoned - Waldo Point
10/12/2013	Manu Kai	30' F/G powerboat	2,169.41 abandoned - CalRecycle
10/16/2013	Herb Sea Ray	22' F/G powerboat	400.00 abandoned - Waldo Point
10/19/2013	Neblina	29' F/G sailboat	1000.00 abandoned - CalRecycle
10/19/2013	Blue Note	35' wooden powerboat	1,597.50 abandoned - CalRecycle
10/22/2013	Windsong	37' wooden powerboat	6985.00 sunk - abandoned - CalRecycle
10/25/2013	Tortuga II	42' wooden powerboat	5500.00 abandoned - CalRecycle
11/12/2013	Turtle	35' steel sailboat	4245.00 abandoned - CalRecycle
11/16/2013	Cobalt *	18' F/G powerboat	500.00 abandoned - CalRecycle
11/19/2013	Magic Isle *	40' wooden powerboat	4,700.00 abandoned - CalRecycle

28 vessels total 64397.00

* indicates estimated invoices

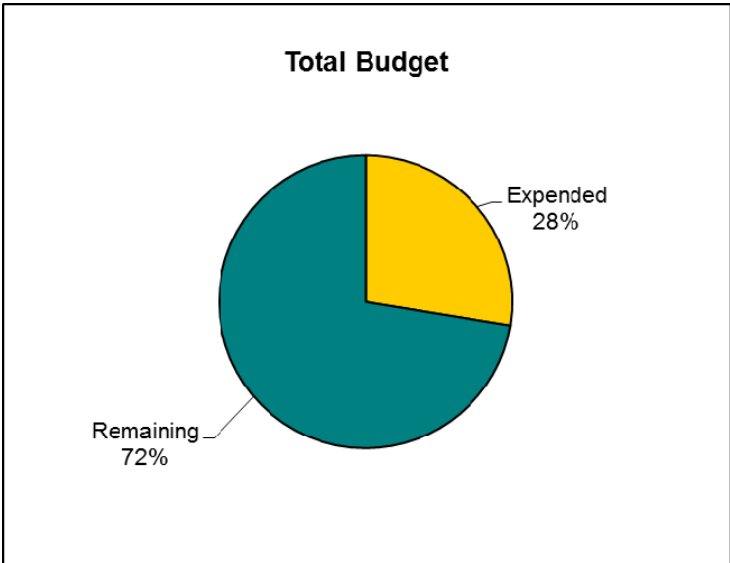
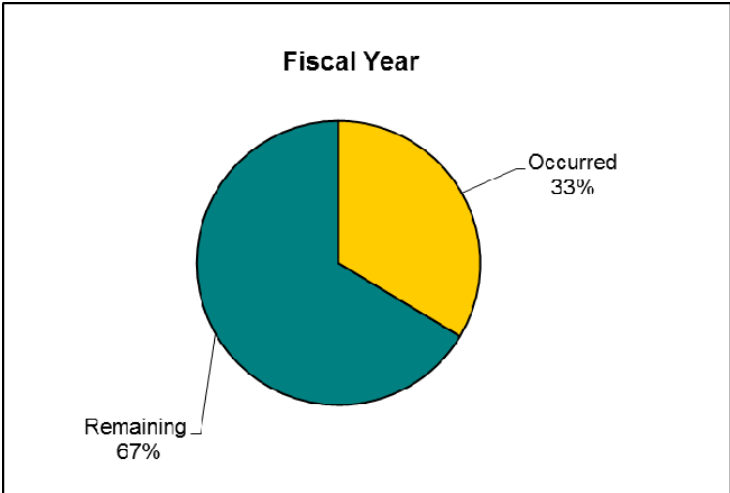
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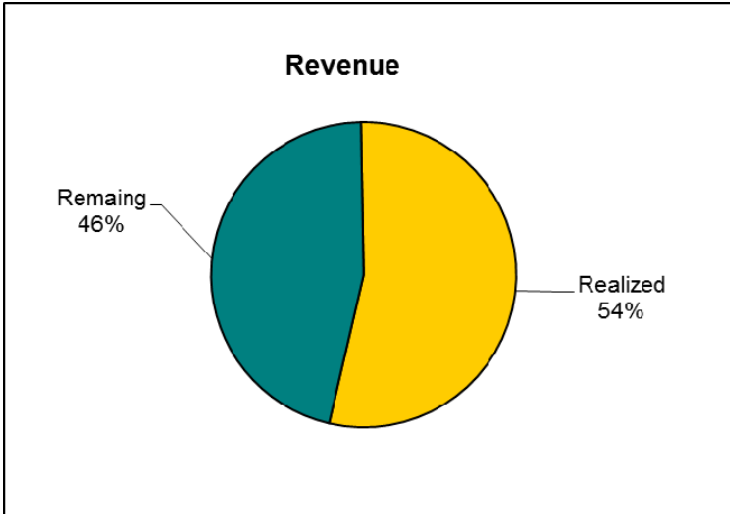
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Prof Svcs - Other	A&S Environmental - oil recycling	689.50
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HazMat Clean Up	HMA - Asbestos inspection	935.00
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Prof Svcs - Other	MT Head - pump-out services	350.00
Rent - Off Space	ICB - office rental	420.00
Prof Svcs - Other	Day Labor	125.00
HazMat Clean Up	HMA - Asbestos inspection	920.00
	Expenses	110,136.21

Percent of Budget and Percent of Year as of November 1, 2013



Expenditures vs. Adopted Budget

Expenditures	\$130,098
Adopted Budget	\$471,672



Realized Revenue vs. Budgeted Revenue

Realized Revenue	\$254,342
Budgeted Revenue	\$471,673

RICHARDSON'S BAY REGIONAL AGENCY

MEMORANDUM

November 15, 2013

TO: RBRA Board

FROM: Ben Berto, RBRA Clerk

SUBJECT: Legal options

Background:

In the interim since the last RBRA meeting (on August 15), Staff met with the ad hoc subcommittee members Wachtel and O'Donnell and discussed possible legal options for RBRA relating to anchorage management.

Several factors weigh in on what direction RBRA can feasibly take, particularly in the near term. The first is budget. RBRA's adopted/projected legal budget for this fiscal year is \$5,000. This current constraint on our legal options will have to be kept in mind as discussions continue.

The subcommittee reached a conclusion with staff that the most effective use of RBRA's available resources at this time is to focus on requiring that every vessel on the anchorage be currently registered. There are several reasons for prioritizing this, as follows:

The first is that pursuing current vessel registration is straightforward legal enforcement standpoint. (Almost) everyone understands and is or should be okay with the concept of registration. It is very easy for a vessel owner to do and very inexpensive (particularly compared to a motor vehicle – more on this below). Efforts to define and regulate what a "derelict" or "unseaworthy" vessel is would be much more complex.

Secondly, when vessels are not currently registered, attempting to find the current vessel owner becomes much more time-consuming and uncertain. The RBRA generally attempts such contact when there is a problem with the vessel (adrift, aground, sinking, etc.). At such times, decisions must be made and action taken quickly. The Harbor Administrator can provide several recent examples of arduous attempts to find a responsible and current owner, and the constrained options for all involved that result from not being able to do so in a timely manner. In the interests of efficiency alone, having the particulars about the theoretically current owner makes the process of contacting that owner much less daunting.

The third reason has to do with the Agency's interest in achieving greater anchorage oversight and organization within the Agency's current regulatory and fiscal context. As can be seen from the article on vessel cleanup efforts in the Oakland Estuary, when a regulatory agency or agencies can bring a multi-million dollar budget and heavy legal firepower to a cleanup and abatement effort, things get cleaned up. However, against that is years of institutional neglect with apparently multiple large commercial vessels (tugboats) allowed to sink and sit for years. RBRA has neither the Oakland Estuary's years of not-so-benign neglect nor its recent financial, regulatory, and enforcement circumstances. Gaining the ability to readily contact the current owners of vast majority of vessels in Richardson's Bay will help RBRA to more effectively pursue its low-key but effective approach towards managing the anchorage.

Another reason for pursuing vessel registration is its feasibility. In addition to the conceptual clarity mentioned above, checking whether the current green registration stickers are affixed to the sides of vessels is something that can be done on a cruise-by basis. Staff is currently investigating partnerships with local law enforcement agencies, specifically the two that currently conduct water patrols in Richardson's Bay – the Marin County Sheriff's Department and Sausalito Police Department. Our Agency and the Harbor Administrator already enjoys good working relationships with officers from both agencies, and Staff is optimistic about securing their participation on a more systematic basis to ensure current vessel registration becomes the rule.

Challenges/results

RBRA and the Harbor Administrator have focused on the proverbial "low-hanging" fruit in terms of vessel management and if need be, abatement. As mentioned above, it is hoped that the vast majority of vessel owners would buy into RBRA's registration efforts. There will always be a few outliers – vessels for which no effort to register will be made.

The intended consequences of failure to register are envisioned to roughly parallel what occurs with unregistered vehicles landside: citation, and if that fails to produce the desired result, impoundment. As we all know about what happens to a car when it gets towed, fees mount quickly at that point. There is a good possibility that if/when an owner shows up, there may be unwillingness to pay the storage and other violation-associated fines and costs. The primary option for the RBRA at that point is, after due process has occurred, to proceed with demolishing the vessel. While this is certainly not the point of vessel registration efforts, there has to be predictable, significant consequences for failure to register a vessel.

The consequences for RBRA could be that a vessel owner who is not willing to register a vessel is willing to pursue legal action against our agency, particularly if the vessel in question has been demolished. This would quickly exhaust RBRA's current annual legal budget. Therefore, there is a real possibility that Staff would be returning to the Board at some point for a budget supplement to accommodate additional legal costs.

Legal challenges aside, Staff anticipates that a vehicle registration campaign would effectively sift out all the vessels that truly are abandoned on the anchorage. A consistent approach to mandating/enforcing current registration of all vessels in Richardson's Bay would also likely have two additional effects. First, it would communicate a more serious RBRA organizational intent than perhaps has previously been the case. It would also get the word out that Richardson's Bay is no longer the convenient, virtually

unregulated and consequence-free vessel storage or dumping ground that some may have previously perceived it.

Recommendation

Direct staff (and the RBRA legal subcommittee) to continue pursuing developing a vehicle registration program and report the results back to the whole Board with results at the next RBRA meeting.

MARINEWAYS Station MW (NEW)	170	8	23	4	27	20.2
PELICAN HARBOR Station #6	4	1	8	4	8	4.0
SAUSALITO YACHT HARBOR Station #5	4	2	13	8	11	6.2
SAUSALITO YACHT HARBOR Station #3	4	13	13	8	11	9.0
CONTROL STATION DAYMARK #6 Station C	2	2	4	1	2	2.0
CONTROL O STRAWBERRY POINT	4	2	4	4	2	3.0

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ENTEROCOCCUS						
Not To Exceed	104					35.0
	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	Geo Mean
WALDO POINT GATES COOP Station #41	41	52	96	20	450	71.3
KAPPAS HOUSEBOATS Station #43	52	10	9	30	9	16.6
WALDO "A" DOCK Station #40	10	9	10	10	52	13.6
WALDO POINT SOUTH 40 Station 15	10	9	41	9	20	14.6
CLIPPER BASIN #4 Station 14	30	9	9	10	10	11.9
ARQUEZ MARINA Station #37	10	9	41	9	9	12.4
CLIPPER BASIN #1, Station CB1 (NEW)	9	9	96	10	30	18.8
SCHOONMAKER BEACH Station #33 (EHS)	9	9	9	9	31	11.5
SCHOONMAKER Station #32	10	9	9	9	10	9.4
GALILEE / NAPA Station #8	30	9	9	9	74	17.5
MARINEWAYS Station MW (NEW)	10	9	9	9	9	9.2
PELICAN HARBOR Station #6	9	9	10	9	9	9.2
SAUSALITO YACHT HARBOR Station #5	9	9	9	9	9	9.0
SAUSALITO YACHT HARBOR Station #3	9	9	9	9	9	9.0
CONTROL STATION DAYMARK #6 Station C	9	9	9	9	9	9.0
CONTROL O STRAWBERRY POINT	10	10	9	9	9	9.4






104						35.0
0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	Geo Mean	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
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DRY SEASON

	Single Sample	30 Day Geo Mean
Total Coliform Not To Exceed	10,000	1000
E. coli Not to Exceed	235	126
Fecal Coliform Not to Exceed	400	200
Enterococcus Not to Exceed	104	35

WET SEASON

	Single Sample	30 Day Geo Mean
Total Coliform Not To Exceed	10,000	1000
E. coli Not to Exceed	235	126
Fecal Coliform Not to Exceed	400	200
Enterococcus Not to Exceed	104	35

						
WALDO POINT GATES COOP Station #41	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	1720	3873	448	2382	784	1410
E. coli 235 / 126	189	98	75	389	109	143
Fecal 400 / 200	240	50	50	130	60	86
Enterococcus 104 / 35	41	52	96	20	450	71

						
0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

KAPPAS HOUSEBOATS Station #43	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	1106	181	435	373	345	407
E. coli 235 / 126	31	30	52	41	41	38
Fecal 400 / 200	130	110	240	50	80	107
Enterococcus 104 / 35	52	10	9	30	9	17

0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

WALDO "A" DOCK Station #40	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	231	201	97	223	109	161
E. coli 235 / 126	31	10	10	20	10	14
Fecal 400 / 200	50	8	17	23	17	19
Enterococcus 104 / 35	10	9	10	10	52	14

0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

WALDO POINT SOUTH 40 Station 15	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	865	181	341	211	657	375
E. coli 235 / 126	120	31	31	52	85	55
Fecal 400 / 200	80	50	17	80	14	38
Enterococcus 104 / 35	10	9	41	9	20	15

0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

CLIPPER BASIN #4 Station 14	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	1789	97	73	110	644	246
E. coli 235 / 126	85	10	10	9	10	15
Fecal 400 / 200	140	17	13	13	7	19
Enterococcus 104 / 35	30	9	9	10	10	12

0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

ARQUEZ MARINA Station #37	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	173	31	315	31	108	89
E. coli 235 / 126	10	9	31	9	9	12
Fecal 400 / 200	23	2	13	4	8	7
Enterococcus 104 / 35	10	9	41	9	9	12

0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

CLIPPER BASIN #1, Station CB1 (NEW)	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	336	52	2723	98	132	228
E. coli 235 / 126	30	9	63	9	41	23
Fecal 400 / 200	17	4	50	13	23	16
Enterococcus 104 / 35	9	9	96	10	30	19

0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0






SCHOONMAKER BEACH Station #33 (EHS)	29-Aug-12	5-Sep-12	12-Sep-12	26-Sep-12	3-Oct-12	19-Oct-09
Total Coliform 10,000 / 1000	86	134	52	161	583	141
E. coli 235 / 126	20	9	20	10	31	16
Fecal 400 / 200	50	1	2	2	23	4
Enterococcus 104 / 35	9	9	9	9	31	12

0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0






SCHOONMAKER Station #32	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	332	9	24196	9	213	169
E. coli 235 / 126	30	9	31	9	10	15
Fecal 400 / 200	50	2	4	2	30	8
Enterococcus 104 / 35	10	9	9	9	10	9

0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

DRY SEASON

	Single Sample					30 Day Geo Mean
Total Coliform Not To Exceed	10,000					1000
E. coli Not to Exceed	235					126
Fecal Coliform Not to Exceed	400					200
Enterococcus Not to Exceed	104					35
						
GALILEE / NAPA Station #8	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	199	9	86	31	146	59
E. coli 235 / 126	52	9	9	9	31	16
Fecal 400 / 200	50	7	22	2	26	13
Enterococcus 104 / 35	30	9	9	9	74	17

WET SEASON

	Single Sample					30 Day Geo Mean
Total Coliform Not To Exceed	10,000					1000
E. coli Not to Exceed	235					126
Fecal Coliform Not to Exceed	400					200
Enterococcus Not to Exceed	104					35
						
0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	
0	0	0	0	0	0	
0	0	0	0	0	0	
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0	0	0	0	0	0	

MARINEWAYS Station MW (NEW)	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13
Total Coliform 10,000 / 1000	410	185	313	85	160	200

0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
0	0	0	0	0	0

E. coli 235 / 126	63	10	41	9	20	22	0	0	0	0	0	0
Fecal 400 / 200	170	8	23	4	27	20	0	0	0	0	0	0
Enterococcus 104 / 35	10	9	9	9	9	9	0	0	0	0	0	0

PELICAN HARBOR Station #6	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
Total Coliform 10,000 / 1000	119	41	96	110	146	94	0	0	0	0	0	0
E. coli 235 / 126	10	9	9	10	10	10	0	0	0	0	0	0
Fecal 400 / 200	4	1	8	4	8	4	0	0	0	0	0	0
Enterococcus 104 / 35	9	9	10	9	9	9	0	0	0	0	0	0

SAUSALITO YACHT HARBOR Station #5	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
Total Coliform 10,000 / 1000	41	10	41	41	31	29	0	0	0	0	0	0
E. coli 235 / 126	9	9	9	9	20	11	0	0	0	0	0	0
Fecal 400 / 200	4	2	13	8	11	6	0	0	0	0	0	0
Enterococcus 104 / 35	9	9	9	9	9	9	0	0	0	0	0	0

SAUSALITO YACHT HARBOR Station #3	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
Total Coliform 10,000 / 1000	122	10	85	359	85	79	0	0	0	0	0	0
E. coli 235 / 126	10	9	9	20	30	14	0	0	0	0	0	0
Fecal 400 / 200	4	13	13	8	11	9	0	0	0	0	0	0
Enterococcus 104 / 35	9	9	9	9	9	9	0	0	0	0	0	0

CONTROL STATION DAYMARK #6 Station C	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
Total Coliform 10,000 / 1000	173	9	74	9	10	25	0	0	0	0	0	0
E. coli 235 / 126	9	9	9	9	10	9	0	0	0	0	0	0
Fecal 400 / 200	2	2	4	1	2	2	0	0	0	0	0	0
Enterococcus 104 / 35	9	9	9	9	9	9	0	0	0	0	0	0

CONTROL O STRAWBERRY POINT	11-Sep-13	18-Sep-13	25-Sep-13	2-Oct-13	8-Oct-13	8-Oct-13	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00	0-Jan-00
Total Coliform 10,000 / 1000	63	98	41	388	31	79	0	0	0	0	0	0
E. coli 235 / 126	9	10	10	31	9	12	0	0	0	0	0	0
Fecal 400 / 200	4	2	4	4	2	3	0	0	0	0	0	0
Enterococcus 104 / 35	10	10	9	9	9	9	0	0	0	0	0	0

Estuary cleanup in progress

San Jose Mercury News

Posted:

InsideBayArea.com

ALAMEDA -- More than 40 abandoned and sunken vessels are in the Oakland-Alameda Estuary, leaking contaminants and posing a hazard to sailors, rowers and others who drift past. But that will soon change under a multimillion-dollar project to raise the wrecks, including two tugboats completely submerged near the Park Street Bridge.

The cleanup, which began in September and should be wrapped up by Thanksgiving, is a combined effort of local, state and federal agencies.

Along with sunken boats and the various debris that juts above the water, the project is targeting people who live aboard their vessels and are illegally moored in the estuary.

So far, crews have raised four boats and cleaned up four sites, said Todd Thalhamer, a project engineer with the state Department of Resources Recycling and Recovery, or CalRecycle, one of the agencies behind the effort.

"It's an underwater dump site," Thalhamer said on Oct. 17, when he joined others helping with the cleanup on a tour of some of the locations, including at Union Point Park along Oakland's Embarcadero.

What can make the work difficult, Thalhamer said, is that some wrecks identified on sonar later disappeared after silt swept over them with the tide from San Francisco Bay.

Among the completely submerged vessels is the *Respect*, a 700-ton tugboat that sank in April 2007 near The Dutra Group engineering yard on Clement Avenue. Built in 1945, the *Respect* served the Atchison, Topeka & Santa Fe Railway before it ended up in private hands and docked in the estuary. The day before it sank, vandals boarded the tug and pillaged it for scrap metal.

The *Captain Al*, a 110-foot tugboat, is submerged at the same spot, as well as two barges. The laborious work to raise a vessel often involves pumping water and removing silt lodged deep within the hull, said Rich Martyn, an on-site coordinator with the Environmental Protection Agency. Crews hope to raise the *Respect* and the three vessels nearby around the end of the month, Thalhamer said.

When a boat is lifted from the water and brought ashore, contaminants such as fuel, oil and asbestos are removed. It's then broken apart and any salvageable metal is recycled. What's left ends up in a landfill.

No unusual items have turned up inside any of the wrecks. But during a recent cleanup in the Sacramento Delta crews raised a vessel that contained radioactive aircraft instruments, Thalhamer said.

"Every time we tackle one of these, it's an eye-opener," he said.

Other wrecks set to be removed include a catamaran, a tug and two barges partially above the water in San Leandro Bay. Pelicans and cormorants currently roost on the tug's wheelhouse.

"Those boats are next on the hit list," Thalhamer said.

The EPA has committed \$3 million for the cleanup, and CalRecycle is putting up \$1.3 million. A \$650,000 grant from the National Fish and Wildlife Foundation is also helping pay for the project, plus Bay Ship & Yacht has provided \$75,000 as part of a mitigation fund for its new dry dock.

The staging area for the work is the vacant lot at Oak and Clement streets, where owner Francis Collins hopes to eventually build housing. Collins is allowing the crews free use of his property.

The effort to launch the cleanup began last year when Oakland police Sgt. Jim Gordon, who is part of the department's marine patrol unit, contacted state officials after discovering dozens of syringes near Jack London Square.

"I realized that something had got to be done," Gordon said. "It was a hazard to the community."

Contact Peter Hegarty at 510-748-1654. Follow him at [Twitter.com/Peter_Hegarty](https://twitter.com/Peter_Hegarty).

Online extra

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2 million oysters in bay begin restoration effort

By Peter Fimrite

Updated 8:14 am, Friday, November 15, 2013

Two million native oysters have settled on man-made reefs in San Francisco Bay over the past year, marking the first major success in an effort to bring back a species ravaged by human excess, researchers said Thursday.

The reefs, made of mesh bags filled with discarded shells from Drakes Bay Oyster Co., are part of the most comprehensive experiment ever attempted to bring back the nearly extinct Olympia oyster and restore its long-lost reef habitat.

"We're seeing a lot of oysters," said Chela Zabin, a wetsuit-clad UC Davis biologist, as she headed into the bay mud to return 60 Olympias that her team of scientists had collected the previous day and studied in the lab overnight. "We're now seeing a second generation of oysters settling on the first, which is what you want to see."

The five-year, \$2 million effort, led by the California Coastal Conservancy, is part of the San Francisco Bay Living Shorelines Project, which is testing a variety of oyster and eelgrass restoration projects and assessing their impacts on wildlife, wave action and shoreline erosion.

The 1-acre shell-mound reef in San Rafael near the Richmond-San Rafael Bridge - and another one south of the San Mateo Bridge in Hayward - are attempts by scientists, including researchers from UC Davis and San Francisco State University, to figure out whether a natural protective barrier can be combined with habitat restoration to protect the shoreline and minimize problems caused by sea-level rise.

"Our hope is that this will be a self-sustaining reef," said Marilyn Latta, the project manager for the Living Shorelines Project and the California State Coastal Conservancy. "To see 2 million oysters in one site in one year shows the potential for this to be successful. I'm already getting calls from cities and counties who would like to do this to protect their shorelines."

Oysters once legion

Besides the huge increase in native oysters, Latta said, wave action has been reduced and more fish, invertebrates and birds have been seen hanging around the reefs.

It is the first major success in a 15-year effort by conservation groups, the aquaculture industry and state and federal agencies to bring back the native oysters, which were once an integral part of the American Indian diet and a staple during the Gold Rush. The Living Shorelines Project, which is borrowing techniques previously used on the East Coast and Gulf Coast, is the largest oyster restoration effort attempted on the West Coast.

Olympia oysters, known scientifically as *Ostrea lurida*, once blanketed subtidal regions from Southern California to southeastern Alaska. The shells were abundant in the many American Indian middens discovered around the bay, some dating back 4,000 years.

Beds picked clean

The tiny mollusks, about the size of a 50-cent piece, were a delicacy during the Gold Rush. The Hangtown Fry was created, according to one legend, by a condemned man who ordered the two most expensive items he knew of at the time - oysters and eggs - for his last meal.

In 1893, Olympia oyster beds covered a total of 8,033 acres in Newport Bay, Elkhorn Slough, San Francisco Bay and Humboldt Bay, according to a recent study published in the scientific journal *Proceedings of the Royal Society B*. Almost a half-million oysters per acre once crowded together along the bay floor, according to the report.

By 1911, the native oyster beds in the Bay Area were gone, scoured clean by ravenous San Franciscans. The oysters that people now eat along the West Coast, including those grown commercially in Drakes and Tomales bays, are Pacific oysters, natives of Japan that are incapable of reproducing naturally in this climate.

Other beneficial effects

The large crop of native oysters on nearby reefs is a promising sign for several reasons, Latta said.

For one, oysters clean the water by filter feeding. A single oyster can filter up to 30 gallons of water a day, removing nitrogen and other pollutants. The other reason is that the oyster beds, or reefs, provide habitat for myriad fish, crabs and other creatures.

There has already been a marked increase in juvenile Dungeness crab, bay shrimp and rock crab in the test area, she said. More birds, including black oyster catchers, great egrets and great blue herons, have also been seen, indicating an increase in the number of fish at the site.

The oysters will not be available for human consumption or fishing, researchers said, adding that they would not be safe to eat because of bay pollution.

Researchers documented a 30 percent reduction in wave energy at the site compared with a control area. That, she said, is a clear indication that the reefs can be effective barriers and might someday be useful in helping protect shoreline communities during storms.

"We are thrilled to see this level of native oysters at the site and to see all of the other species there," Latta said. "It's an indication that it is healthy habitat and that we are bringing back some ecosystem functions that they can thrive on."

Not all smooth sailing

Obstacles still remain, however. Recovery of Olympias has thus far been hampered by silty bay mud left over from the Gold Rush, pollution and a voracious alien whelk snail known as the Atlantic oyster drill. The gluttonous snail, introduced to the area in shipments of Atlantic oysters, drills into the shells of oysters and sucks out the insides.

Latta said the biological reefs that researchers are building will help them figure out the best way to restore San Francisco's long-lost bay ecosystem, which sustained humans for thousands of years - then was wiped out in one century.

"That is our hope," she said. "It's a very innovative time. We're developing new data that may affect policy in the future."

Online resources

The website for the San Francisco Bay Living Shorelines Project is at www.sfbaylivingshorelines.org.

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