California State Parks
Division of Boating and Waterways
Commission

Regular Meeting

November 9, 2016

Sacramento, California

California State Parks Division of Boating and Waterways

Boating and Waterway Commission

Current Transformation Efforts

- Impact over process
- Service over competition
- Adapt for changing needs

By the Numbers . . .

California Boating:

775,000 Registered Vessels

3,000,000 Paddlecraft

1,400 Marinas/Facilities

California Waterways:

1,100 Miles of Coast

3,000 Lakes and Reservoirs

190,000 Miles of Rivers

*Economic Impact does not include Paddlecraft

DBW Funding

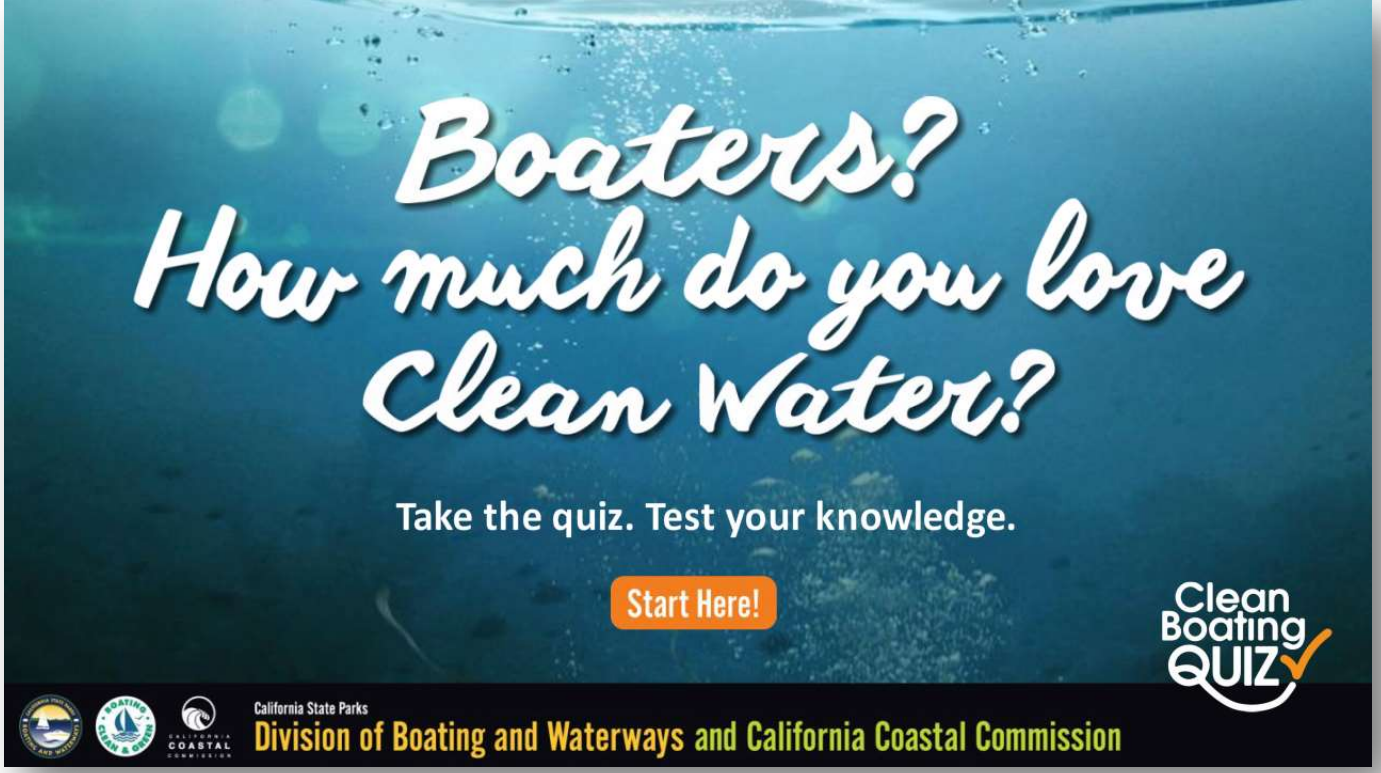
- Fuel Tax
- Vessel Registration
- Quagga Mussel Sticker Fees
- Loan Repayments/Interest
- Sport Fish Restoration and Boating Federal Trust Fund

2015/16 DBW Budget
$75,582,000

Statistic-based Work

- Updating Boating Needs Assessment
- Analyzing accident reports
- Examine industry studies
- Identify marketing surveys
- Deliver where facilities are needed
- Determine funding sources
- Identify local and underserved areas
- Elevate strategic partnerships
- Prioritize projects

Preserving Our Waterways for Generations to Come



DBW Clean and Green Programs Built of Strong Partnerships

The Clean Vessel Act Helps Keep Sewage Out of Our Waterways

Control and Management of Aquatic Invasive Species

Dressinid Mussel Infestation Prevention Efforts Growing

Surrendered and Abandoned Vessel Exchange Promotes Inter-Agency Communication

Building Our Boating Infrastructure

Public and Private Marina Loans Good for DBW and the Public

Local Assistance for Public Boat Launching Facilities

Soil Erosion Control Vital to Coastline and Facilities

Yacht and Ship Licensing Protects Boaters

For-Hire Licensure Adds to Consumer Protection

Enhancing Boater Safety through Education, Outreach and Enforcement

CALIFORNIA STATE PARKS BOATING AND WATERWAYS

Life Jacket Trade-ins, Loan Stations, Schools and Media Outreach Directly

Save Lives

Law Enforcement Training and Grant Programs Promote Safety

California BOATER CARD

Mandatory Boater Education in Place to Begin January 2018

For information about DBW grants, loans and program details visit:

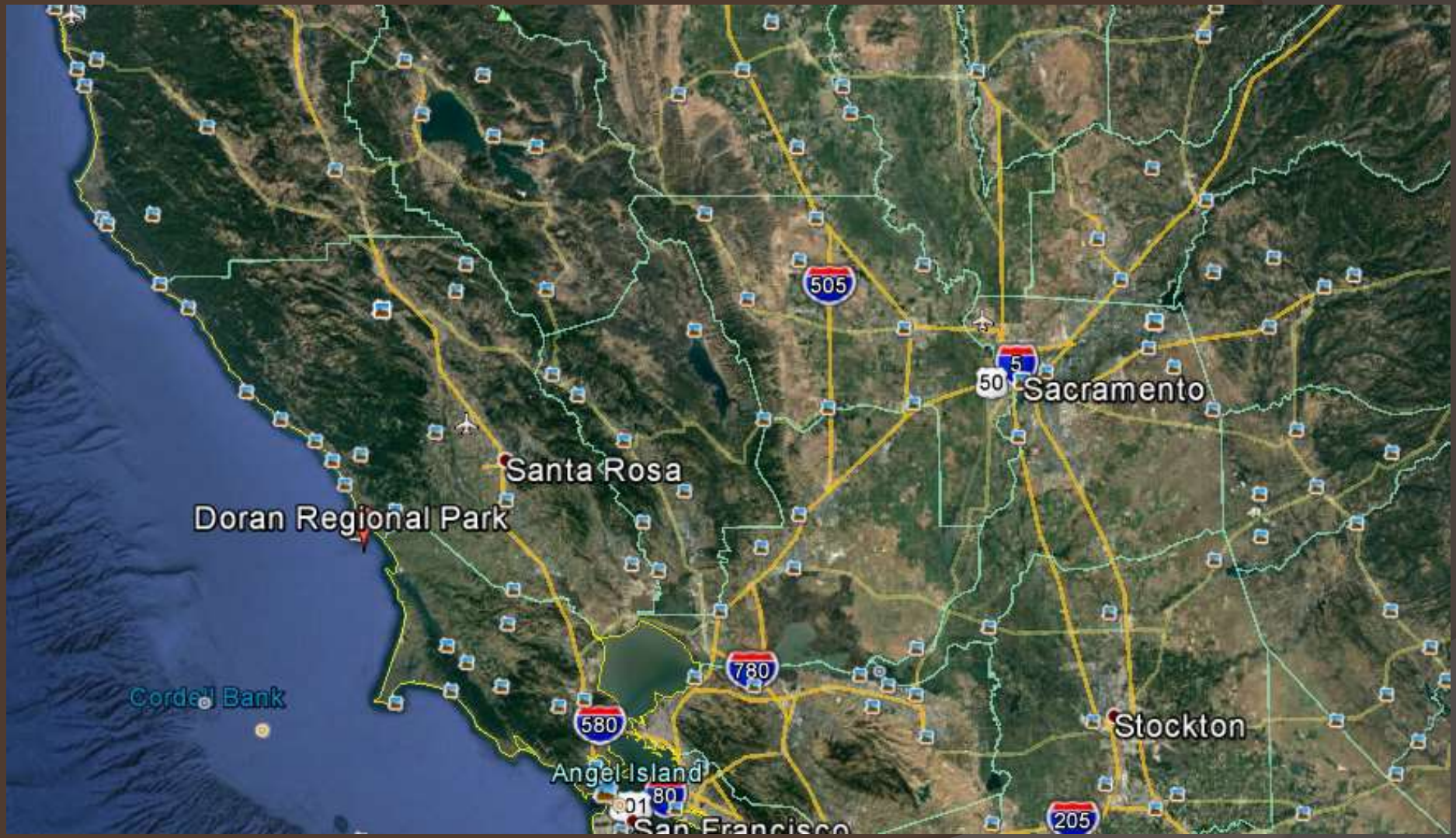
www.BoatCalifornia.com

Thank you!

pubinfo@parks.ca.gov

1-888-326-2822

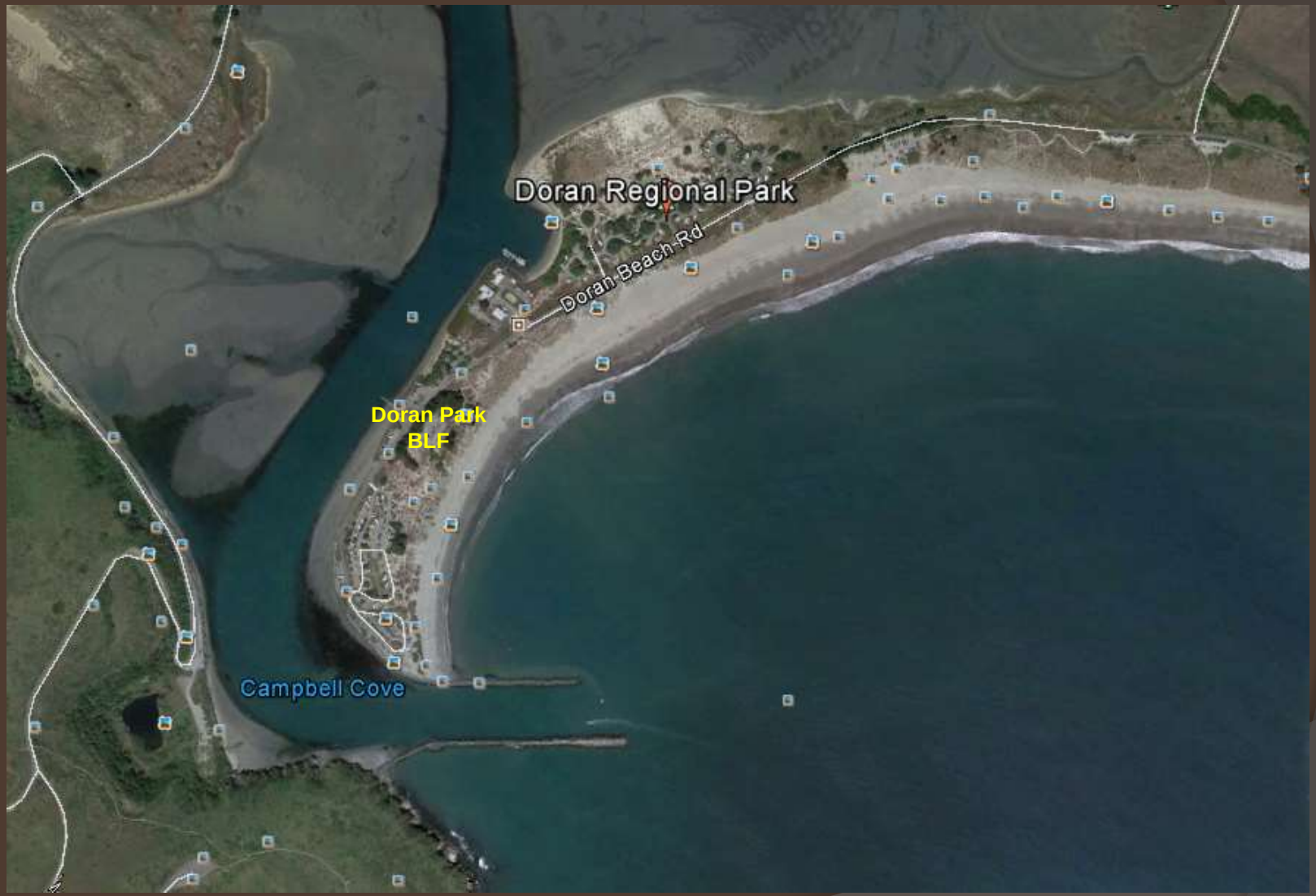
DORAN PARK BOAT LAUNCHING FACILITY



County of Sonoma

Proposed Grant: $990,000

DORAN PARK BOAT LAUNCHING FACILITY



County of Sonoma

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DORAN PARK BOAT LAUNCHING FACILITY

County of Sonoma
Proposed Grant: $990,000

DORAN PARK BOAT LAUNCHING FACILITY

Single-Lane Boat Launch Ramp

DORAN PARK BOAT LAUNCHING FACILITY

Ramp Apron

DORAN PARK BOAT LAUNCHING FACILITY

Pile-Guided Boarding Floats

DORAN PARK BOAT LAUNCHING FACILITY

Parking Area

DORAN PARK BOAT LAUNCHING FACILITY

Boat Wash Area with Overflow Parking in the Background

DORAN PARK BOAT LAUNCHING FACILITY

Fish Cleaning Station

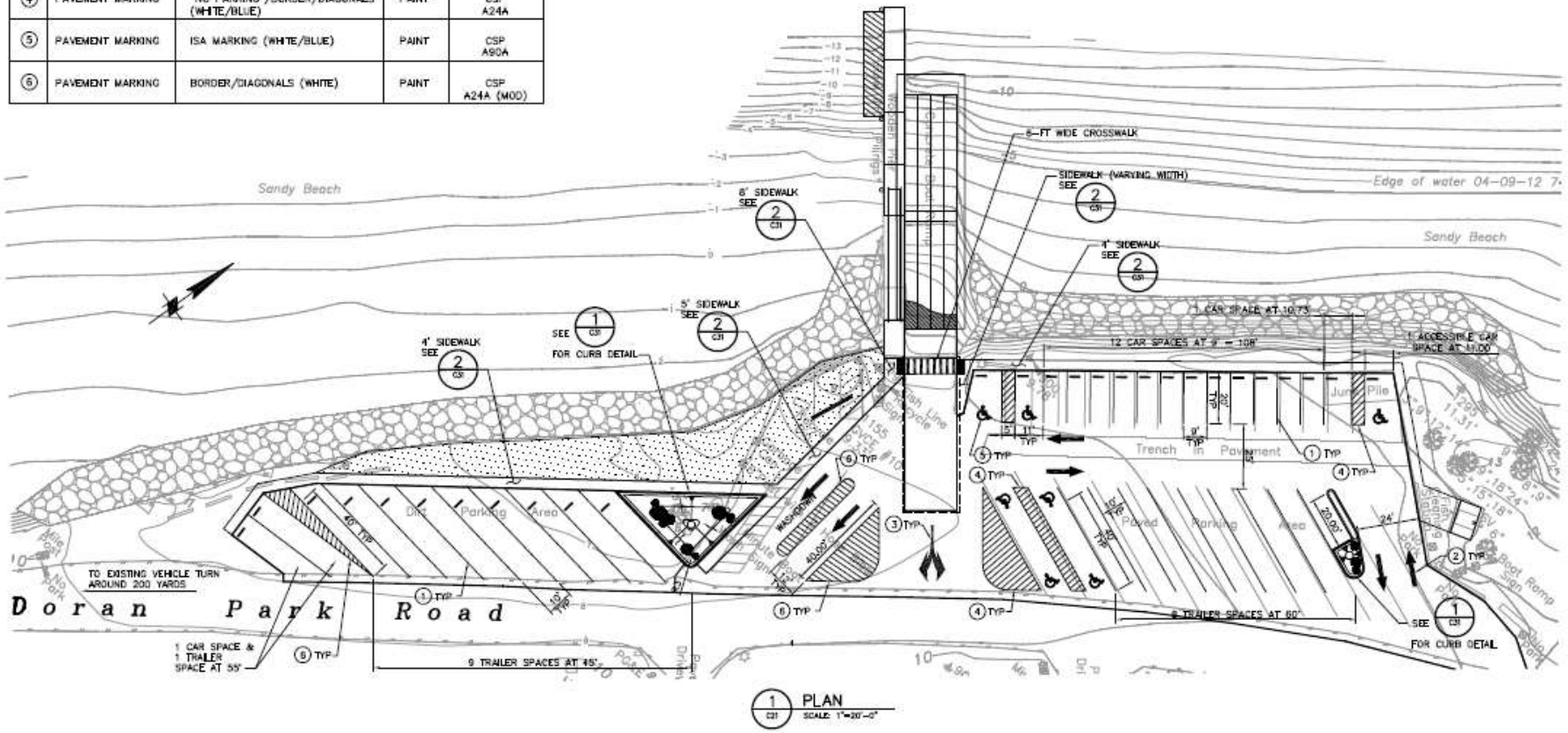
DORAN PARK BOAT LAUNCHING FACILITY

TRAFFIC STRIPING, PAVEMENT MARKING, AND SIGNAGE TABLE

ITEM	FEATURE	DESCRIPTION	TYPE	DETAIL
①	PAVEMENT MARKING	PARKING STALL (4" SOLID WHITE)	PAINT	N/A
②	PAVEMENT MARKING	ARROW – TYPE I, 10–FT (WHITE)	PAINT	CSP A24D, A24E
③	PAVEMENT MARKING	TYPE III(B) ARROW (WHITE)	PAINT	CSP A24A
④	PAVEMENT MARKING	"NO PARKING"/BORDER/DIAGONALS (WHITE/BLUE)	PAINT	CSP A24A
⑤	PAVEMENT MARKING	ISA MARKING (WHITE/BLUE)	PAINT	CSP A90A
⑥	PAVEMENT MARKING	BORDER/DIAGONALS (WHITE)	PAINT	CSP A24A (MOD)

PARKING SPACES

PARKING TYPE	# SPACES
CAR	15
CAR ACCESSIBLE	3
TRAILER	18
TRAILER ACCESSIBLE	2
TOTAL	38



1 C31 PLAN
SCALE: 1"=20'-0"

SCALE: 1" = 20'-0"

REVISION	DESCRIPTION	BY	DATE
–	–	–	–

moffatt & nichol
2185 N. California Blvd., Suite 500
Walnut Creek, California 94596

DESIGN	BP	DR	NN	CHK	RBD
JOB NO.	7852	SUBMITTED BY		TITLE	

BOAT LAUNCH FACILITIES IMPROVEMENT

SCHEDULE B
DORAN PARK BLF
PARKING LOT LAYOUT

DATE 23 OCT 2016
SHEET 4 OF 9
C22

DORAN PARK BOAT LAUNCHING FACILITY

Table 1: Doran Park BLF Project Cost Estimate		
CONSTRUCTION SCOPE	**COST ESTIMATE**	
Mobilization	$	127,000
Demolition		42,300
Boat Launch Ramp		151,897
Concrete Ramp Apron		26,600
Pile-Guided Boarding Floats and Gangway		138,610
Parking Area		83,923
Boat Wash Area		16,200
Accessible Pathways		47,610
Fish Cleaning Station		27,400
Site Utilities and Landscaping		43,360
Project Signage		5,000
Construction Subtotal	**$**	**709,900**
NON-CONSTRUCTION COSTS		
Biological Monitoring and Mitigation		65,000
Escalation 2.3%		16,328
Contingency 10%		70,990
Engineering 10%		70,990
Inspection 5%		35,495
Permits 3%		21,297
Non-Construction Subtotal	**$**	**280,100**
TOTAL ESTIMATED PROJECT COST	**$**	**990,000**
Source = County Engineer's Cost Estimate dated 9/22/16		
*Percentages are of the Construction Subtotal		
*2.3% per year for 1 year = 2.3% escalation		

DORAN PARK BOAT LAUNCHING FACILITY

DBW seeks the Commission's advice and comment on this proposed $990,000 Harbors and Watercraft Revolving Fund planning and construction grant to the County of Sonoma for the Doran Park Boat Launching Facility improvements *described in this November 9, 2016 Feasibility Report.*

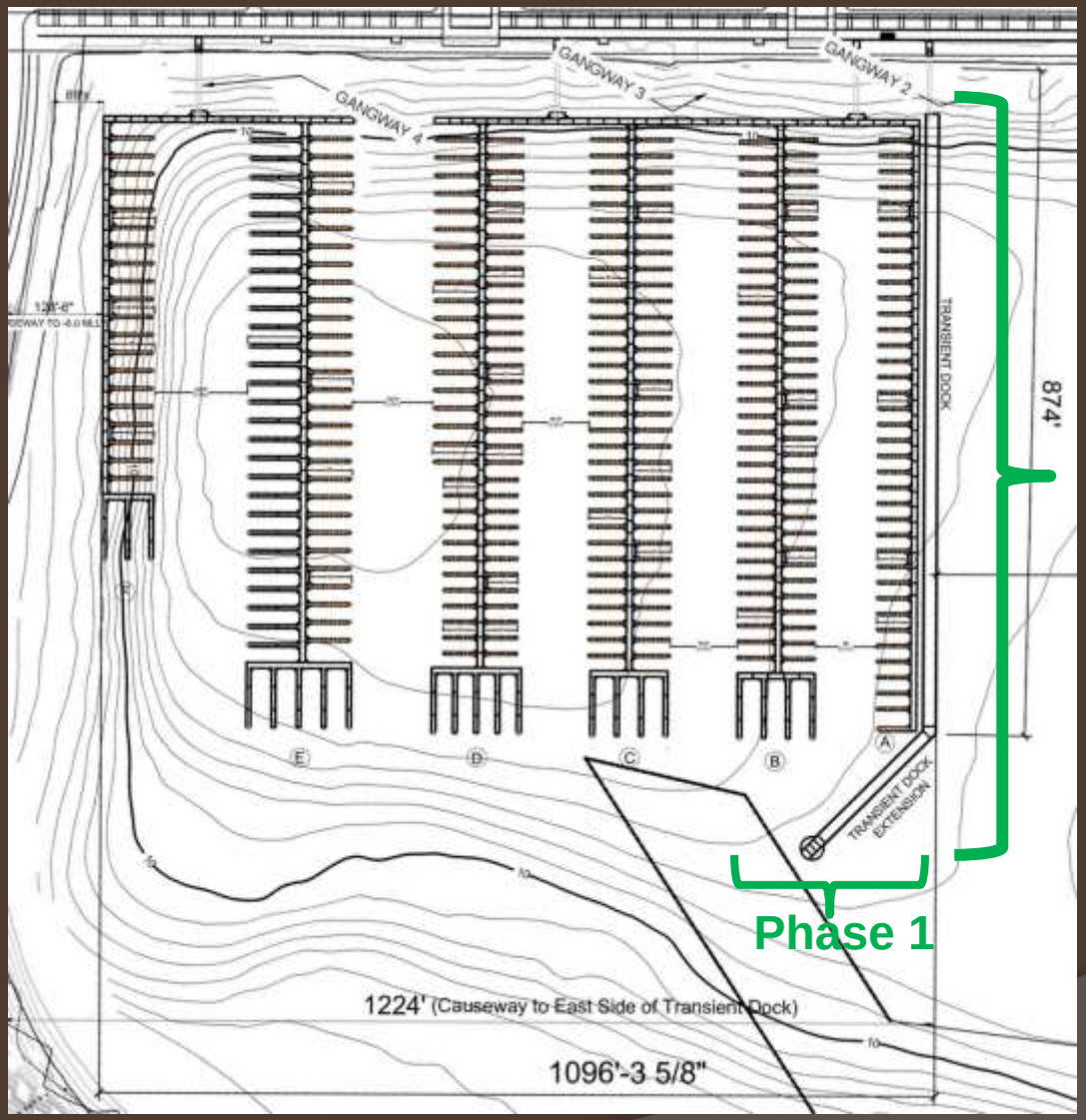
Treasure Island Marina

Treasure Island Enterprises
Proposed Recreational Marina Loan:$4,200,000

Treasure Island Marina

Existing Condition

Treasure Island Marina

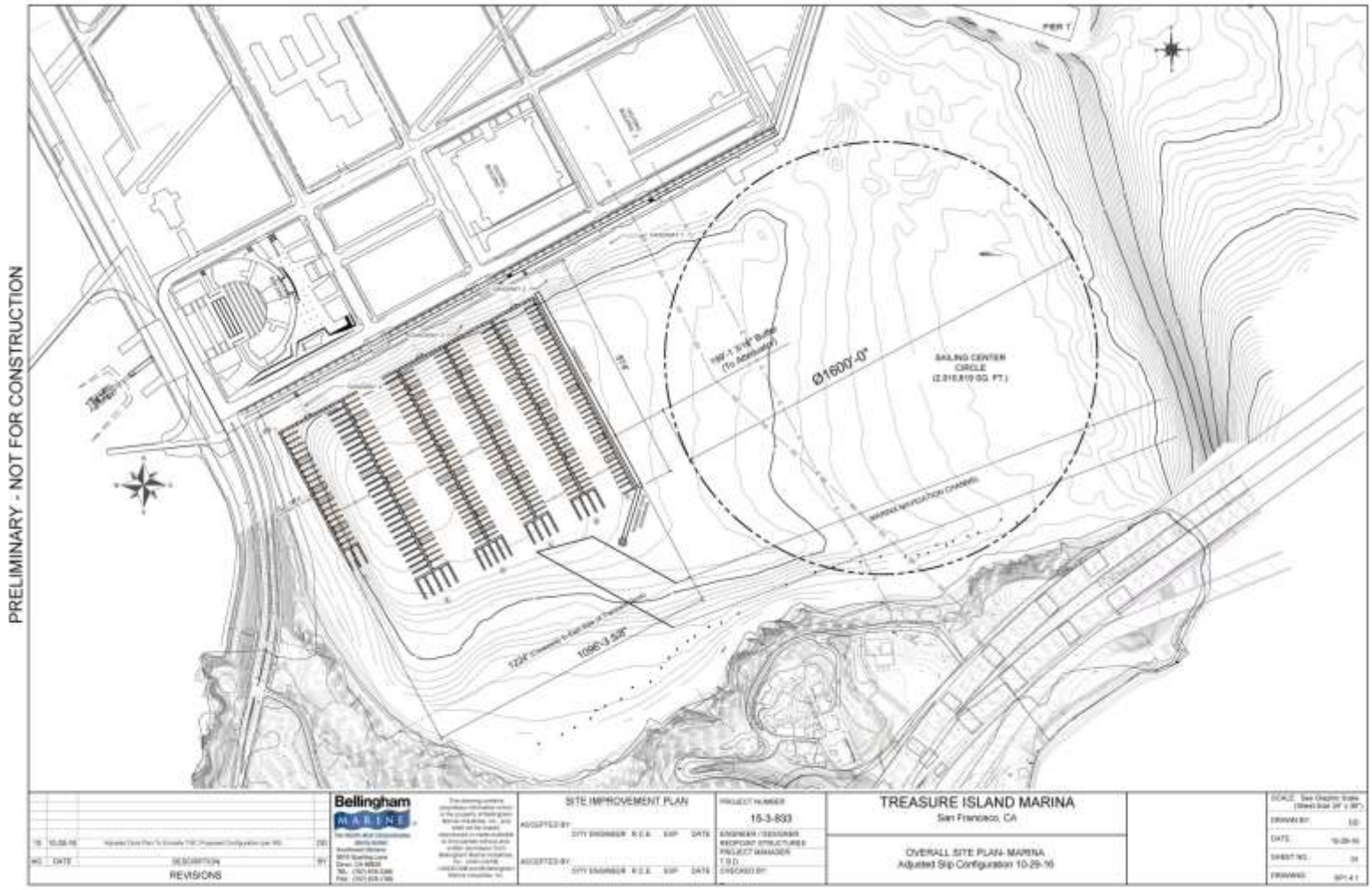


Proposed Revised Treasure Island Marina Site Plan

Treasure Island Marina

Table 1: Phase 1 Development	
Slips	Length (feet)
6	40
66	45
34	50
3	80
109	
Source: *Treasure Island Financial Model 10/31/16*	

Treasure Island Marina



Revised Treasure Island Marina Site Plan,

Treasure Island Marina

Dredging:

- Basin and entrance channel $2.6 million
- Maintenance
  1. TIE's 12/17/15 estimate, $374,000 annually
  2. San Francisco Marina West entrance channel $500,000 annually
  3. Climate Change (changes in wave patterns and siltation)
  4. Other loans include maintenance dredging as part of ongoing operational expenses
  5. Two other loans in the bay area have defaulted due to siltation

Treasure Island Marina

TABLE 3: TREASURE ISLAND MARINA
CASH FLOW PROJECTIONS AND DEBT COVERAGE RATIO
CY 2015 THROUGH CY 2039
(Figures in Thousands)

	Data from 5/12/16 submittal	Assumption	Assumption	Phase 1 Construction, partial occupancy	Phase 1 First full year after construction	Assumes 2% per year increase in revenue																				
	Actual	Budget	Budget																							
REVENUES	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
Berths - Regular (1)	301	301	348	686	880	907	1,073	1,184	1,338	1,453	1,449	1,512	1,542	1,573	1,605	1,637	1,669	1,703	1,737	1,772	1,807	1,843	1,880	1,918	1,956	
Berths - Guest Revenue (2)	9	9	9	10	16	16	17	17	17	18	18	18	19	19	20	20	20	21	21	22	22	22	23	23	24	
Berths - Liveaboards (3)	0	0	0	24	42	43	44	45	45	46	47	48	49	50	51	52	53	54	55	57	58	59	60	61	62	
Transient Dock (2)	0	0	0	39	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71	73	74	76	
Dry Storage - Dinghy (2)	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Subtotal: Slip Rent/Dry Storage	**310**	**310**	**357**	**759**	**990**	**1,019**	**1,187**	**1,301**	**1,457**	**1,574**	**1,573**	**1,638**	**1,671**	**1,705**	**1,739**	**1,773**	**1,809**	**1,845**	**1,882**	**1,920**	**1,958**	**1,997**	**2,037**	**2,078**	**2,119**	
Laundry/Vending (2)	0	0	0	6	6	6	6	6	7	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9	
Electricity (2)	4	0	0	29	48	49	50	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71	
Subtotal: Ad'l Revenue	**4**	**0**	**0**	**35**	**54**	**55**	**56**	**57**	**59**	**60**	**61**	**62**	**63**	**65**	**66**	**67**	**69**	**70**	**71**	**73**	**74**	**76**	**77**	**79**	**80**	
TOTAL REVENUE	**314**	**310**	**357**	**794**	**1,044**	**1,074**	**1,244**	**1,358**	**1,516**	**1,634**	**1,634**	**1,701**	**1,735**	**1,769**	**1,805**	**1,841**	**1,878**	**1,915**	**1,953**	**1,992**	**2,032**	**2,073**	**2,114**	**2,157**	**2,200**	
EXPENSES (per proforma except where noted)	adjusted for Phase 1 development only																									
Rent (per Ground Lease) (4)	90	90	90	90	90	90	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Percentage Rent (5)	0	0	0	0	0	0	0	136	152	163	163	170	260	265	271	276	282	287	293	299	305	311	317	324	330	
Salaries & Fringes	66	62	62	74	125	128	130	133	135	138	141	144	146	149	152	155	159	162	165	168	172	175	179	182	186	
Insurance/Acct'g/Legal	15	15	15	66	84	86	87	89	91	93	95	96	98	100	102	104	107	109	111	113	115	118	120	122	125	
Direct Operating Expenses (6)	40	43	43	132	200	204	208	212	216	221	225	230	234	239	244	249	254	259	264	269	275	280	286	291	297	
Common Area Charge (triple net)	3	3	3	2	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	
Credit to Rent (7)	0	0	0	0	0	0	(100)	(100)	(100)	(100)	(100)	(100)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(100)	0	0	
Office to Rent	12	12	12	39	59	71	72	74	75	77	79	80	82	83	85	87	88	90	92	94	96	98	100	102	104	
Posessory/Property Tax	5	5	5	5	129	157	160	163	167	170	173	177	180	184	188	191	195	199	203	207	211	216	220	224	229	
Utilities	4	4	4	30	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71	73	74	76	
Overhead /Management/Almar	47	47	47	36	59	60	61	63	64	65	66	68	69	71	72	73	75	76	78	79	81	83	84	86	88	
Maintenance Dredging Reserve (8)	0	0	0	0	0	0	0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	
DBW req'd maintenance reserve (9)	0	0	0	16	21	21	25	27	30	33	33	34	35	35	36	37	38	38	39	40	41	41	42	43	44	
Subtotal Operating Expenses:	**282**	**281**	**281**	**490**	**822**	**873**	**791**	**1,005**	**1,040**	**1,070**	**1,087**	**1,112**	**1,120**	**1,143**	**1,167**	**1,191**	**1,216**	**1,241**	**1,267**	**1,294**	**1,320**	**1,348**	**1,476**	**1,604**	**1,633**	
NET OPERATING INCOME	**32**	**29**	**76**	**304**	**222**	**201**	**453**	**353**	**476**	**564**	**547**	**589**	**615**	**626**	**638**	**649**	**661**	**674**	**686**	**699**	**712**	**725**	**639**	**552**	**566**	
Less: DBW DEBT SERVICE ($4.2 MILLION LOAN, 4.5 % INTEREST RATE, 20 YEAR	0	0	160	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320		
Less: Ad'l DEBT SERVICE (10)																										
NET INCOME	**32**	**29**	**76**	**144**	**(98)**	**(119)**	**133**	**33**	**156**	**244**	**227**	**269**	**295**	**306**	**318**	**329**	**341**	**354**	**366**	**379**	**392**	**405**	**319**	**232**	**246**	
DBW INCOME/EXPENSE RATIO (min. 1.2:1 req'd)				**1.62**	**1.27**	**1.23**	**1.57**	**1.35**	**1.46**	**1.53**	**1.50**	**1.53**	**1.55**	**1.55**	**1.55**	**1.55**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.43**	**1.34**	**1.3**	
DEBT SERVICE COVERAGE RATIO, minimum 1.25				**1.90**	**0.69**	**0.63**	**1.41**	**1.10**	**1.49**	**1.76**	**1.71**	**1.84**	**1.92**	**1.96**	**1.99**	**2.03**	**2.07**	**2.11**	**2.14**	**2.18**	**2.22**	**2.27**	**2.00**	**1.73**	**1.7**	

NOTES:

1 Revenue projections submitted by TIE vary between TIE's financial models. Therefore, revenue as shown is combination of data from existing rent roll (submitted Oct, 2016) increasing annually by 2% and assuming sustained occupancy on existing slips plus revenue from new slips per occupancy and lineal footage assumptions provided by TIE in October proforma. Construction occuring 2018 with first full year of occupancy in 2019.
2 Future revenue estimated by TIE, graduating 2% annually after 2019 (the first full year after construction).
3 Liveabord assumes 17 liveaboards, occupancy of 90%, monthly surcharge of $229.5 ea/mo. in 2019, increaseing 2% annually thereafter
4 Rent, proforma states 75,000. Per TIDA 10/26/16 current rate is $90,000 but this is subject to change.
5 Percentage Rent - in 2022, Rent increases to 10% gross revenue and in 2027 the percentage rent increases to 15%
6 Direct operating expenses are Contractor Expenses less salary, payroll tax and ins.
7 Credit to rent - This credit has not yet been negotiated with TIDA. This line item is an assumption.
8 Maintenance Dredge Reserve - estimated $150,000 payment to begin the third year (2022) after construction dredging is complete (2019)
9 DBW Maintenance Reserve per Exhibit A, Art. 2, Definition Q. of the Loan Agreement.
10 Ad'l Debt Service - none yet identified
11 Revisions from 10/12 expenses: increase in salaries and fringe by $21,977, decrease in posessory interest tax by $26,875

Treasure Island Marina

TABLE 3: TREASURE ISLAND MARINA
CASH FLOW PROJECTIONS AND DEBT COVERAGE RATIO
CY 2015 THROUGH CY 2039
(Figures in Thousands)

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REVENUES	Actual 2015	Budget 2016	Budget 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Berths - Regular (1)	301	301	348	686	880	907	1,073	1,184	1,338	1,453	1,449	1,512	1,542	1,573	1,605	1,637	1,669	1,703	1,737	1,772	1,807	1,843	1,880	1,918	1,956
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Dry Storage - Dinghy (2)	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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Credit to Rent (7)	0	0	0	0	0	0	(100)	(100)	(100)	(100)	(100)	(100)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(100)	0	0
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Less: DBW DEBT SERVICE ($4.2 MILLION LOAN, 4.5 % INTEREST RATE, 20 YEAR		0	0	160	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
Less: Ad'l DEBT SERVICE (10)																									
NET INCOME	**32**	**29**	**76**	**144**	**(98)**	**(119)**	**133**	**33**	**156**	**244**	**227**	**269**	**295**	**306**	**318**	**329**	**341**	**354**	**366**	**379**	**392**	**405**	**319**	**232**	**246**
DBW INCOME/EXPENSE RATIO (min. 1.2:1 req'd)				**1.62**	**1.27**	**1.23**	**1.57**	**1.35**	**1.46**	**1.53**	**1.50**	**1.53**	**1.55**	**1.55**	**1.55**	**1.55**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.43**	**1.34**	**1.35**
DEBT SERVICE COVERAGE RATIO, minimum 1.25				**1.90**	**0.69**	**0.63**	**1.41**	**1.10**	**1.49**	**1.76**	**1.71**	**1.84**	**1.92**	**1.96**	**1.99**	**2.03**	**2.07**	**2.11**	**2.14**	**2.18**	**2.22**	**2.27**	**2.00**	**1.73**	**1.77**

NOTES:

1 Revenue projections submitted by TIE vary between TIE's financial models. Therefore, revenue as shown is combination of data from existing rent roll (submitted Oct, 2016) increasing annually by 2% and assuming sustained occupancy on existing slips plus revenue from new slips per occupancy and lineal footage assumptions provided by TIE in October proforma. Construction occuring 2018 with first full year of occupancy in 2019.
2 Future revenue estimated by TIE, graduating 2% annually after 2019 (the first full year after construction).
3 Liveabord assumes 17 liveaboards, occupancy of 90%, monthly surcharge of $229.5 ea/mo. in 2019, increaseing 2% annually thereafter
4 Rent, proforma states 75,000. Per TIDA 10/26/16 current rate is $90,000 but this is subject to change.
5 Percentage Rent - in 2022, Rent increases to 10% gross revenue and in 2027 the percentage rent increases to 15%
6 Direct operating expenses are Contractor Expenses less salary, payroll tax and ins.
7 Credit to rent - This credit has not yet been negotiated with TIDA. This line item is an assumption.
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9 DBW Maintenance Reserve per Exhibit A, Art. 2, Definition Q. of the Loan Agreement.
10 Ad'l Debt Service - none yet identified
11 Revisions from 10/12 expenses: increase in salaries and fringe by $21,977, decrease in posessory interest tax by $26,875

Treasure Island Marina

TABLE 3: TREASURE ISLAND MARINA
CASH FLOW PROJECTIONS AND DEBT COVERAGE RATIO
CY 2015 THROUGH CY 2039
(Figures in Thousands)

	Data from 5/12/16 submittal	Assumption	Assumption	Phase 1 Construction, partial occupancy	Phase 1 First full year after construction	Assumes 2% per year increase in revenue																			
REVENUES	Actual 2015	Budget 2016	Budget 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Berths - Regular (1)	301	301	348	686	880	907	1,073	1,184	1,338	1,453	1,449	1,512	1,542	1,573	1,605	1,637	1,669	1,703	1,737	1,772	1,807	1,843	1,880	1,918	1,956
Berths - Guest Revenue (2)	9	9	9	10	16	16	17	17	17	18	18	18	19	19	20	20	20	21	21	22	22	22	23	23	24
Berths - Liveaboards (3)	0	0	0	24	42	43	44	45	45	46	47	48	49	50	51	52	53	54	55	57	58	59	60	61	62
Transient Dock (2)	0	0	0	39	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71	73	74	76
Dry Storage - Dinghy (2)	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Subtotal: Slip Rent/Dry Storage	**310**	**310**	**357**	**759**	**990**	**1,019**	**1,187**	**1,301**	**1,457**	**1,574**	**1,573**	**1,638**	**1,671**	**1,705**	**1,739**	**1,773**	**1,809**	**1,845**	**1,882**	**1,920**	**1,958**	**1,997**	**2,037**	**2,078**	**2,119**
Laundry/Vending (2)	0	0	0	6	6	6	6	6	7	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9
Electricity (2)	4	0	0	29	48	49	50	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71
Subtotal: Ad'l Revenue	**4**	**0**	**0**	**35**	**54**	**55**	**56**	**57**	**59**	**60**	**61**	**62**	**63**	**65**	**66**	**67**	**69**	**70**	**71**	**73**	**74**	**76**	**77**	**79**	**80**
TOTAL REVENUES	**314**	**310**	**357**	**794**	**1,044**	**1,074**	**1,244**	**1,358**	**1,516**	**1,634**	**1,634**	**1,701**	**1,735**	**1,769**	**1,805**	**1,841**	**1,878**	**1,915**	**1,953**	**1,992**	**2,032**	**2,073**	**2,114**	**2,157**	**2,200**
EXPENSES (per proforma except where noted)	adjusted for Phase 1 development only																								
Rent (per Ground Lease) (4)	90	90	90	90	90	90	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percentage Rent (5)	0	0	0	0	0	0	0	136	152	163	163	170	260	265	271	276	282	287	293	299	305	311	317	324	330
Salaries & Fringe	66	62	62	74	125	128	130	133	135	138	141	144	146	149	152	155	159	162	165	168	172	175	179	182	186
Insurance/Acct'g/Legal	15	15	15	66	84	86	87	89	91	93	95	96	98	100	102	104	107	109	111	113	115	118	120	122	125
Direct Operating Expenses (6)	40	43	43	132	200	204	208	212	216	221	225	230	234	239	244	249	254	259	264	269	275	280	286	291	297
Common Area Charge (triple net)	3	3	3	2	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6
Credit to Rent (7)	0	0	0	0	0	0	(100)	(100)	(100)	(100)	(100)	(100)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(100)	0	0
Office to Rent	12	12	12	39	59	71	72	74	75	77	79	80	82	83	85	87	88	90	92	94	96	98	100	102	104
Posessory/Property Tax	5	5	5	5	129	157	160	163	167	170	173	177	180	184	188	191	195	199	203	207	211	216	220	224	229
Utilities	4	4	4	30	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71	73	74	76
Overhead /Management/Almar	47	47	47	36	59	60	61	63	64	65	66	68	69	71	72	73	75	76	78	79	81	83	84	86	88
Maintenance Dredging Reserve (8)	0	0	0	0	0	0	0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
DBW req'd maintenance reserve (9)	0	0	0	16	21	21	25	27	30	33	33	34	35	35	36	37	38	38	39	40	41	41	42	43	44
Subtotal Operating Expenses:	**282**	**281**	**281**	**490**	**822**	**873**	**791**	**1,005**	**1,040**	**1,070**	**1,087**	**1,112**	**1,120**	**1,143**	**1,167**	**1,191**	**1,216**	**1,241**	**1,267**	**1,294**	**1,320**	**1,348**	**1,476**	**1,604**	**1,633**
NET OPERATING INCOME	**32**	**29**	**76**	**304**	**222**	**201**	**453**	**353**	**476**	**564**	**547**	**589**	**615**	**626**	**638**	**649**	**661**	**674**	**686**	**699**	**712**	**725**	**639**	**552**	**566**
Less: DBW DEBT SERVICE ($4.2 MILLION LOAN, 4.5 % INTEREST RATE, 20 YEAR		0	0	160	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
Less: Ad'l DEBT SERVICE (10)																									
NET INCOME	**32**	**29**	**76**	**144**	**(98)**	**(119)**	**133**	**33**	**156**	**244**	**227**	**269**	**295**	**306**	**318**	**329**	**341**	**354**	**366**	**379**	**392**	**405**	**319**	**232**	**246**
DBW INCOME/EXPENSE RATIO (min. 1.2:1 req'd)				**1.62**	**1.27**	**1.23**	**1.57**	**1.35**	**1.46**	**1.53**	**1.50**	**1.53**	**1.55**	**1.55**	**1.55**	**1.55**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.43**	**1.34**	**1.35**
DEBT SERVICE COVERAGE RATIO, minimum 1.25				**1.90**	**0.69**	**0.63**	**1.41**	**1.10**	**1.49**	**1.76**	**1.71**	**1.84**	**1.92**	**1.96**	**1.99**	**2.03**	**2.07**	**2.11**	**2.14**	**2.18**	**2.22**	**2.27**	**2.00**	**1.73**	**1.77**

NOTES:

1 Revenue projections submitted by TIE vary between TIE's financial models. Therefore, revenue as shown is combination of data from existing rent roll (submitted Oct, 2016) increasing annually by 2% and assuming sustained occupancy on existing slips plus revenue from new slips per occupancy and lineal footage assumptions provided by TIE in October proforma. Construction occuring 2018 with first full year of occupancy in 2019.

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9 DBW Maintenance Reserve per Exhibit A, Art. 2, Definition Q. of the Loan Agreement.

10 Ad'l Debt Service - none yet identified

11 Revisions from 10/12 expenses: increase in salaries and fringe by $21,977, decrease in posessory interest tax by $26,875

Treasure Island Marina

TABLE 3: TREASURE ISLAND MARINA
CASH FLOW PROJECTIONS AND DEBT COVERAGE RATIO
CY 2015 THROUGH CY 2039
(Figures in Thousands)

	Data from 5/12/16 submittal	Assumption	Assumption	Phase 1 Construction, partial occupancy	Phase 1 First full year after construction	Assumes 2% per year increase in revenue																			
REVENUES	Actual 2015	Budget 2016	Budget 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Berths - Regular (1)	301	301	348	686	880	907	1,073	1,184	1,338	1,453	1,449	1,512	1,542	1,573	1,605	1,637	1,669	1,703	1,737	1,772	1,807	1,843	1,880	1,918	1,956
Berths - Guest Revenue (2)	9	9	9	10	16	16	17	17	17	18	18	18	19	19	20	20	20	21	21	22	22	22	23	23	24
Berths - Liveaboards (3)	0	0	0	24	42	43	44	45	45	46	47	48	49	50	51	52	53	54	55	57	58	59	60	61	62
Transient Dock (2)	0	0	0	39	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71	73	74	76
Dry Storage - Dinghy (2)	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Subtotal: Slip Rent/Dry Storage	**310**	**310**	**357**	**759**	**990**	**1,019**	**1,187**	**1,301**	**1,457**	**1,574**	**1,573**	**1,638**	**1,671**	**1,705**	**1,739**	**1,773**	**1,809**	**1,845**	**1,882**	**1,920**	**1,958**	**1,997**	**2,037**	**2,078**	**2,119**
Laundry/Vending (2)	0	0	0	6	6	6	6	6	7	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9
Electricity (2)	4	0	0	29	48	49	50	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71
Subtotal: Ad'l Revenue	**4**	**0**	**0**	**35**	**54**	**55**	**56**	**57**	**59**	**60**	**61**	**62**	**63**	**65**	**66**	**67**	**69**	**70**	**71**	**73**	**74**	**76**	**77**	**79**	**80**
TOTAL REVENUES	**314**	**310**	**357**	**794**	**1,044**	**1,074**	**1,244**	**1,358**	**1,516**	**1,634**	**1,634**	**1,701**	**1,735**	**1,769**	**1,805**	**1,841**	**1,878**	**1,915**	**1,953**	**1,992**	**2,032**	**2,073**	**2,114**	**2,157**	**2,200**
EXPENSES (per proforma except where noted)	adjusted for Phase 1 development only																								
Rent (per Ground Lease) (4)	90	90	90	90	90	90	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percentage Rent (5)	0	0	0	0	0	0	0	136	152	163	163	170	260	265	271	276	282	287	293	299	305	311	317	324	330
Salaries & Fringe	66	62	62	74	125	128	130	133	135	138	141	144	146	149	152	155	159	162	165	168	172	175	179	182	186
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Common Area Charge (triple net)	3	3	3	2	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6
Credit to Rent (7)	0	0	0	0	0	0	(100)	(100)	(100)	(100)	(100)	(100)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(100)	0	0
Office to Rent	12	12	12	39	59	71	72	74	75	77	79	80	82	83	85	87	88	90	92	94	96	98	100	102	104
Posessory/Property Tax	5	5	5	5	129	157	160	163	167	170	173	177	180	184	188	191	195	199	203	207	211	216	220	224	229
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Maintenance Dredging Reserve (8)	0	0	0	0	0	0	0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
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Subtotal Operating Expenses:	**282**	**281**	**281**	**490**	**822**	**873**	**791**	**1,005**	**1,040**	**1,070**	**1,087**	**1,112**	**1,120**	**1,143**	**1,167**	**1,191**	**1,216**	**1,241**	**1,267**	**1,294**	**1,320**	**1,348**	**1,476**	**1,604**	**1,633**
NET OPERATING INCOME	**32**	**29**	**76**	**304**	**222**	**201**	**453**	**353**	**476**	**564**	**547**	**589**	**615**	**626**	**638**	**649**	**661**	**674**	**686**	**699**	**712**	**725**	**639**	**552**	**566**
Less: DBW DEBT SERVICE ($4.2 MILLION LOAN, 4.5 % INTEREST RATE, 20 YEAR		0	0	160	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
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NET INCOME	**32**	**29**	**76**	**144**	**(98)**	**(119)**	**133**	**33**	**156**	**244**	**227**	**269**	**295**	**306**	**318**	**329**	**341**	**354**	**366**	**379**	**392**	**405**	**319**	**232**	**246**
DBW INCOME/EXPENSE RATIO (min. 1.2:1 req'd)				**1.62**	**1.27**	**1.23**	**1.57**	**1.35**	**1.46**	**1.53**	**1.50**	**1.53**	**1.55**	**1.55**	**1.55**	**1.55**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.43**	**1.34**	**1.35**
DEBT SERVICE COVERAGE RATIO, minimum 1.25				**1.90**	**0.69**	**0.63**	**1.41**	**1.10**	**1.49**	**1.76**	**1.71**	**1.84**	**1.92**	**1.96**	**1.99**	**2.03**	**2.07**	**2.11**	**2.14**	**2.18**	**2.22**	**2.27**	**2.00**	**1.73**	**1.77**

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Treasure Island Marina

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CY 2015 THROUGH CY 2039
(Figures in Thousands)

	Data from 5/12/16 submittal			Phase 1 Construction, partial occupancy	Phase 1 First full year after construction	Assumes 2% per year increase in revenue																			
	Actual	Assumption Budget	Assumption Budget																						
REVENUES	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Berths - Regular (1)	301	301	348	686	880	907	1,073	1,184	1,338	1,453	1,449	1,512	1,542	1,573	1,605	1,637	1,669	1,703	1,737	1,772	1,807	1,843	1,880	1,918	1,956
Berths - Guest Revenue (2)	9	9	9	10	16	16	17	17	17	18	18	18	19	19	20	20	20	21	21	22	22	22	23	23	24
Berths - Liveaboards (3)	0	0	0	24	42	43	44	45	45	46	47	48	49	50	51	52	53	54	55	57	58	59	60	61	62
Transient Dock (2)	0	0	0	39	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71	73	74	76
Dry Storage - Dinghy (2)	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Subtotal: Slip Rent/Dry Storage	**310**	**310**	**357**	**759**	**990**	**1,019**	**1,187**	**1,301**	**1,457**	**1,574**	**1,573**	**1,638**	**1,671**	**1,705**	**1,739**	**1,773**	**1,809**	**1,845**	**1,882**	**1,920**	**1,958**	**1,997**	**2,037**	**2,078**	**2,119**
Laundry/Vending (2)	0	0	0	6	6	6	6	6	7	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9
Electricity (2)	4	0	0	29	48	49	50	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71
Subtotal: Ad'l Revenue	**4**	**0**	**0**	**35**	**54**	**55**	**56**	**57**	**59**	**60**	**61**	**62**	**63**	**65**	**66**	**67**	**69**	**70**	**71**	**73**	**74**	**76**	**77**	**79**	**80**
TOTAL REVENUES	**314**	**310**	**357**	**794**	**1,044**	**1,074**	**1,244**	**1,358**	**1,516**	**1,634**	**1,634**	**1,701**	**1,735**	**1,769**	**1,805**	**1,841**	**1,878**	**1,915**	**1,953**	**1,992**	**2,032**	**2,073**	**2,114**	**2,157**	**2,200**
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Percentage Rent (5)	0	0	0	0	0	0	0	136	152	163	163	170	260	265	271	276	282	287	293	299	305	311	317	324	330
Salaries & Fringe	66	62	62	74	125	128	130	133	135	138	141	144	146	149	152	155	159	162	165	168	172	175	179	182	186
Insurance/Acct'g/Legal	15	15	15	66	84	86	87	89	91	93	95	96	98	100	102	104	107	109	111	113	115	118	120	122	125
Direct Operating Expenses (6)	40	43	43	132	200	204	208	212	216	221	225	230	234	239	244	249	254	259	264	269	275	280	286	291	297
Common Area Charge (triple net)	3	3	3	2	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6
Credit to Rent (7)	0	0	0	0	0	0	(100)	(100)	(100)	(100)	(100)	(100)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(100)	0	0
Office to Rent	12	12	12	39	59	71	72	74	75	77	79	80	82	83	85	87	88	90	92	94	96	98	100	102	104
Posessory/Property Tax	5	5	5	5	129	157	160	163	167	170	173	177	180	184	188	191	195	199	203	207	211	216	220	224	229
Utilities	4	4	4	30	51	52	53	54	55	56	57	59	60	61	62	63	65	66	67	69	70	71	73	74	76
Overhead /Management/Almar	47	47	47	36	59	60	61	63	64	65	66	68	69	71	72	73	75	76	78	79	81	83	84	86	88
Maintenance Dredging Reserve (8)	0	0	0	0	0	0	0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
DBW req'd maintenance reserve (9)	0	0	0	16	21	21	25	27	30	33	33	34	35	35	36	37	38	38	39	40	41	41	42	43	44
Subtotal Operating Expenses:	**282**	**281**	**281**	**490**	**822**	**873**	**791**	**1,005**	**1,040**	**1,070**	**1,087**	**1,112**	**1,120**	**1,143**	**1,167**	**1,191**	**1,216**	**1,241**	**1,267**	**1,294**	**1,320**	**1,348**	**1,476**	**1,604**	**1,633**
NET OPERATING INCOME	**32**	**29**	**76**	**304**	**222**	**201**	**453**	**353**	**476**	**564**	**547**	**589**	**615**	**626**	**638**	**649**	**661**	**674**	**686**	**699**	**712**	**725**	**639**	**552**	**566**
Less: DBW DEBT SERVICE ($4.2 MILLION LOAN, 4.5 % INTEREST RATE, 20 YEAR		0	0	160	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
Less: Ad'l DEBT SERVICE (10)																									
NET INCOME	**32**	**29**	**76**	**144**	**(98)**	**(119)**	**133**	**33**	**156**	**244**	**227**	**269**	**295**	**306**	**318**	**329**	**341**	**354**	**366**	**379**	**392**	**405**	**319**	**232**	**246**
DBW INCOME/EXPENSE RATIO (min. 1.2:1 req'd)				**1.62**	**1.27**	**1.23**	**1.57**	**1.35**	**1.46**	**1.53**	**1.50**	**1.53**	**1.55**	**1.55**	**1.55**	**1.55**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.43**	**1.34**	**1.35**
DEBT SERVICE COVERAGE RATIO, minimum 1.25				**1.90**	**0.69**	**0.63**	**1.41**	**1.10**	**1.49**	**1.76**	**1.71**	**1.84**	**1.92**	**1.96**	**1.99**	**2.03**	**2.07**	**2.11**	**2.14**	**2.18**	**2.22**	**2.27**	**2.00**	**1.73**	**1.77**

NOTES:

1 Revenue projections submitted by TIE vary between TIE's financial models. Therefore, revenue as shown is combination of data from existing rent roll (submitted Oct, 2016) increasing annually by 2% and assuming sustained occupancy on existing slips plus revenue from new slips per occupancy and lineal footage assumptions provided by TIE in October proforma. Construction occuring 2018 with first full year of occupancy in 2019.
2 Future revenue estimated by TIE, graduating 2% annually after 2019 (the first full year after construction).
3 Liveabord assumes 17 liveaboards, occupancy of 90%, monthly surcharge of $229.5 ea/mo. in 2019, increaseing 2% annually thereafter
4 Rent, proforma states 75,000. Per TIDA 10/26/16 current rate is $90,000 but this is subject to change.
5 Percentage Rent - in 2022, Rent increases to 10% gross revenue and in 2027 the percentage rent increases to 15%
6 Direct operating expenses are Contractor Expenses less salary, payroll tax and ins.
7 Credit to rent - This credit has not yet been negotiated with TIDA. This line item is an assumption.
8 Maintenance Dredge Reserve - estimated $150,000 payment to begin the third year (2022) after construction dredging is complete (2019)
9 DBW Maintenance Reserve per Exhibit A, Art. 2, Definition Q. of the Loan Agreement.
10 Ad'l Debt Service - none yet identified
11 Revisions from 10/12 expenses: increase in salaries and fringe by $21,977, decrease in posessory interest tax by $26,875

Treasure Island Marina

Collateral

- Lease – lease back
- Security Agreement
- Recorded Collateral Assignments of Rents and Leases
- Ongoing UCC-1 filing

Treasure Island Marina

RECOMMENDED CONDITIONS:

1. Final lease agreement shall included a provision that in the event TIE defaults on its loan with DBW, that DBW shall have no obligation to make any lease payments.

2. Provides documentation that the entirety of Phase 1 is fully funded.

3. Marina design shall to be adaptable to National Oceanic and Atmospheric Administration's 50 year sea level rise projections.

4. TIE shall complete a study to determine estimated accumulation of siltation of the new proposed marina design, estimated dredge expense, and rate of occurrence.
   a. Annual reserve payments of the amount determined by the study shall be deposited into a Maintenance Dredging Reserve Account.
   b. Two years of annual payments shall be placed into the Maintenance Dredging Reserve Escrow Account prior to issuance of loan funding

5. $640,000 shall be placed in an additional and separate Payment Reserve Escrow Account until an ongoing Debt Service Coverage Ratio of 1.25 is assured.

Treasure Island Marina

DBW seeks informal comment on Treasure Island Enterprises request for a $4,200,000 Recreation Marina Loan for the Treasure Island Marina and staff's recommended conditions as described in the *November 9, 2016 Feasibility Report*.

Boating and Waterways Commission

RECEIVE PUBLIC COMMENT OF BOATING AND WATERWAYS PROGRAMS

DBW's Mission:
To provide safe and convenient public access to California's waterways and leadership in promoting safe, enjoyable and environmentally sound recreational boating.

Clean Vessel Act Program

US Fish and Wildlife Service (FWS)

Funding Source: Sport Fish Restoration and Boating Trust Fund

Match: 25% required

Clean Vessel Act Program

CVA Updates:

- FY 2016 CVA Award –
  - Inland $1.17M
  - Coastal $948,750
- 2009 CVA Audit

Program Changes:

- On Line Grants Application(OLGA)
- Reporting Requirements

Clean Vessel Act Program

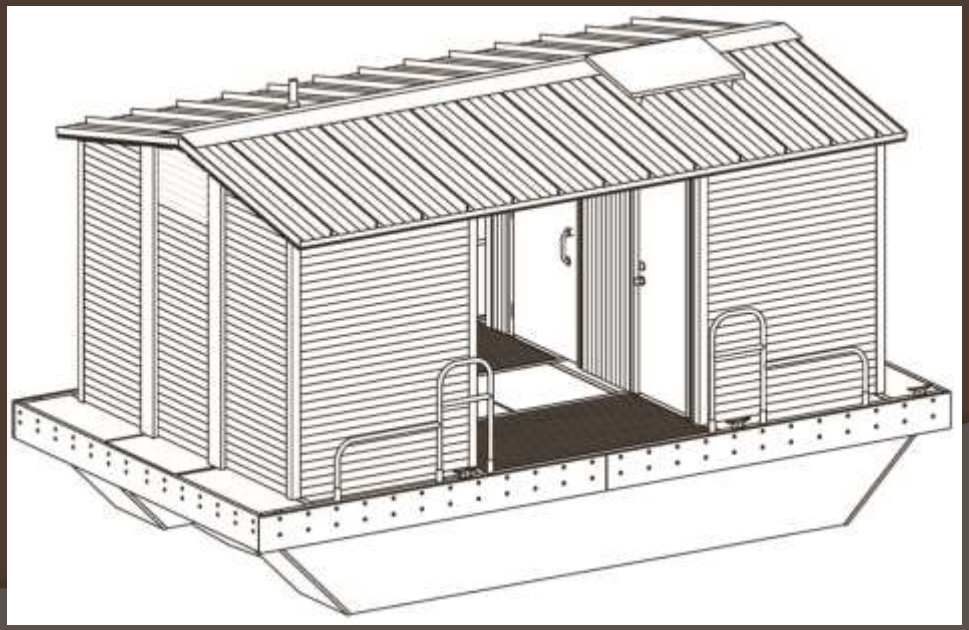
Program Components:

- Floating Restrooms
- Pumpouts and Dump Stations
- Outreach and Education

Floating Restrooms

Floating Restrooms

- **Accomplishments**
  - 109 units / 39 Lakes and Reservoirs
  - Approx. 1 Million Gallons / year
- **Updates**
  - Design
  - $926,500 for FY 2016
  - 2017 Deliveries



2017 Deliveries

- 2 Units – Lake Otay, San Diego County
- 1 Unit – Lake Hodges, San Diego County
- 2 Units – Lake Piru, Ventura County
- 2 Units – Lake Casitas, Ventura County
- 2 Units – Bullard's Bar, Yuba County
- 2 Units – Don Pedro Res, Tuolumne County

Pumpouts

Grand Marina - Alameda

West Point Marina – Redwood City

Outreach and Education

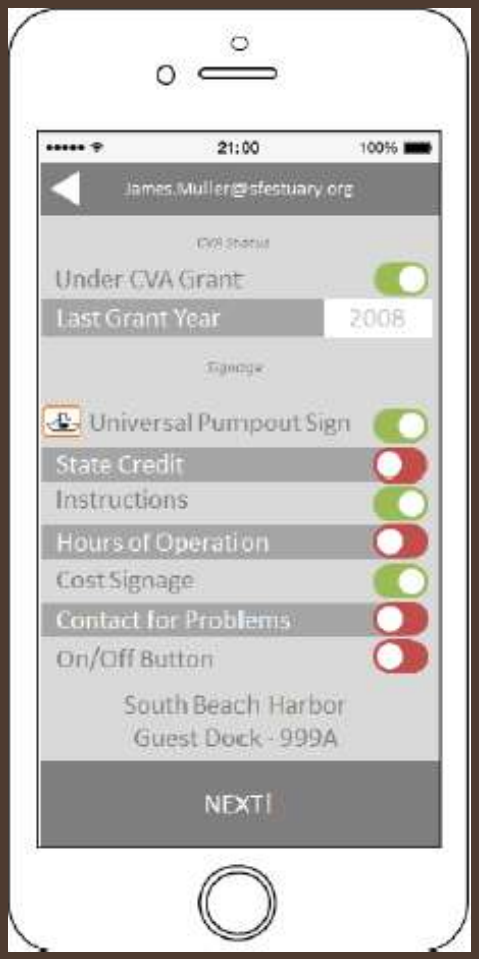
New Project

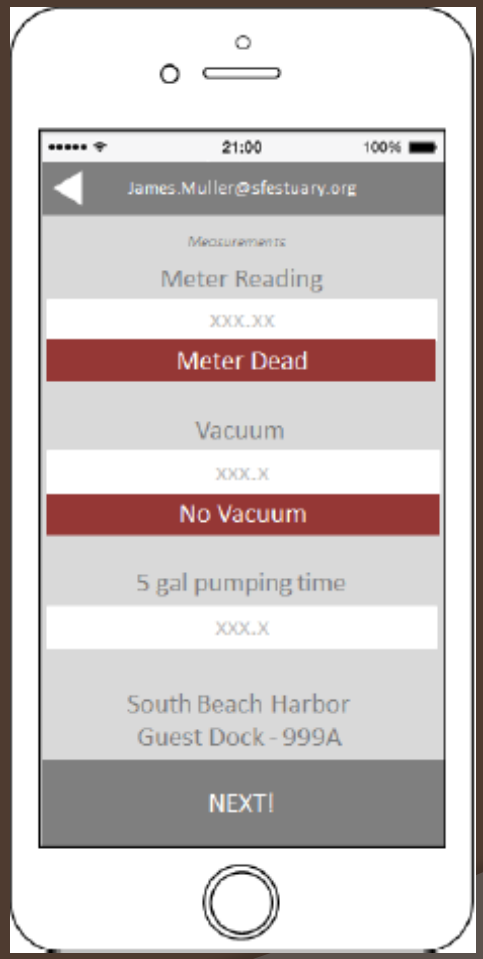
Cell Phone App

Boater location (GPS) & pumpout locations

Reporting tool and camera

Clean Vessel Act Grants





Monitoring capability

Local Assistance Boat Launching Facility Program

DBW provides grants to local governmental agencies for development or improvement of public boat launch facilities (BLF's).

Local Assistance Boat Launching Facility Program

- Budget — FY2015/16 $12.65 Million
FY2016/17 $ 4.67 Million
- Current Projects — Approximately 50 BLF Projects
- Application Deadline — February 1, 2017.
- Online Grant Application — FY2019/20 Funding Cycle

Local Assistance Boat Launching Facility Program

Projects completed since November 2015

Project	Grantee	Grant Awards
Channel Islands BLF	Ventura County	$4,510,000
Antioch Marina BLF	City of Antioch	$ 217,000
Sandy Beach BLF	Solano County	$ 60,000
Redbud Park BLF	City of Clearlake	$ 945,000
Sunbeam Lake BLF	Imperial County	$ 425,000

Channel Islands BLF
Ventura County, $4,510,000

Antioch Marina BLF
City of Antioch, $217,000

Sandy Beach BLF
Solano County, $60,000

Redbud Park BLF
City of Clearlake, $945,000

Sunbeam Lake BLF
Imperial County, $425,000

Statewide Ramp Repair and Modification Program

Quickly restore safe and convenient public boating access by repairing, replacing, widening or extending boat ramps, boarding floats, restrooms and such that have been damaged by wind, waves, floods, accidents, wildfires, etc.

Statewide Ramp Repair and Modification Program

- Budget — FY2015/16 $134,600; FY2016/17 Not Awarded
- Current Projects — 4 Ramp Repair and Modification Projects
- Application deadline — February 1, 2017.
- Online Grant Application — FY2018/19 Funding Cycle

Statewide Ramp Repair and Modification Program

Projects Completed since November 2015

Project	Grantee	Grant Award
Red Bluff River Front Park	City of Red Bluff	$209,000
Olde Port Beach Restroom	Port San Luis Harbor District	$ 96,000

Red Bluff River Front Park

Statewide Non-Motorized Boat Launching Facility Program

Create or improve public non-motorized boating access to address the rapidly growing paddling community (kayaks, rafts, stand-up paddleboards, sailboats, etc.).

Statewide Non-Motorized Boat Launching Facility Program

Statewide Non-Motorized Boat Launching Facility Program

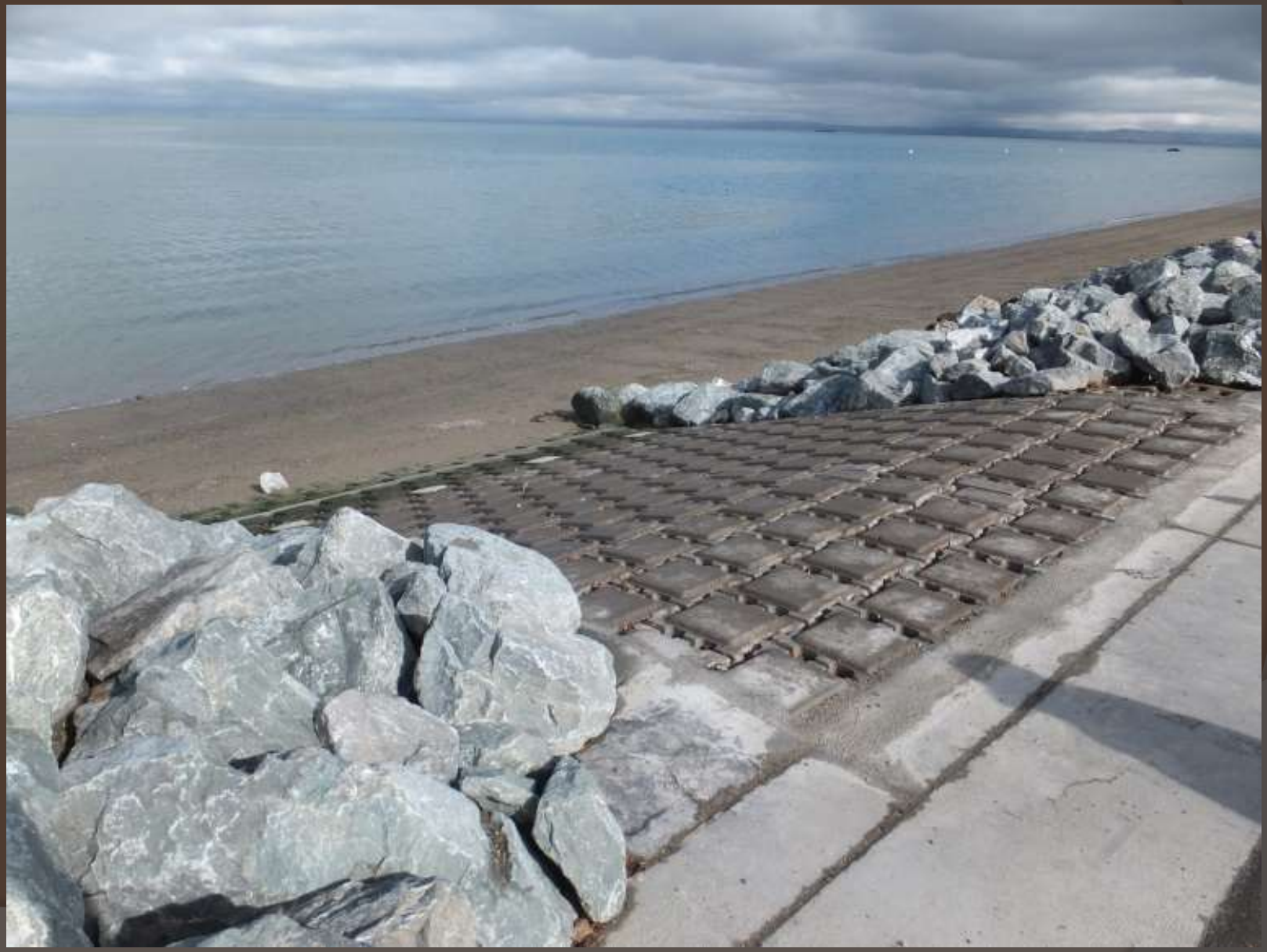
- Budget — FY2015/16 $1 Million; FY2016/17 Not Awarded
- Current Projects — 6 Non-Motorized BLF Projects
- Application deadline — February 1, 2017.
- Online Grant Application — FY2018/19 Funding Cycle

Statewide Non-Motorized Boat Launching Facility Program

Projects Completed since November 2015

Project	Grantee	Grant Award
Coyote Point Promenade	San Mateo County	$500,000
Santa Margarita Lake	San Luis Obispo County	$300,000
Nordheimer (Six River Nation Forest)	US Forest Service	$200,000
Silver Lake (Plumas National Forest)	US Forest Service	$ 23,600
South Sailing Cove Design	City of Berkeley	$160,000
Waterford Permits	City of Waterford	$ 50,000

Coyote Point Promenade



Santa Margarita Lake

Statewide Sign Program

DBW provides grants to install or replace signs that are missing, damaged, inaccurate, badly worn, necessary for safety, or required by federal grant agreement.

Local Assistance Public Small Craft Harbor Loan Program

Local Assistance Public Small Craft Harbor Loan Program

FY 2016/17 budget: **$9.3 million**

In FY2015/16:

- Approximately **$12 million** in loan principal was repaid to the HWRF
- Approximately **$4 million** in interest was paid to the HWRF

- Loans entering repayment since November, 2015:
  Santa Barbara, Docks H and I, $1.5 million

- Loans fully repaid since November, 2015:
  San Mateo County Harbor District, $6.1 million
  Ventura Port District, $6.4 million

Local Assistance Public Small Craft Harbor Loan Program

Program Update:

- Application deadline: February 1, 2017 (for FY18/19 funding)
- Online applications begin next year (for FY19/20 funding)
- DBW is seeking external assistance to ensure program conforms to commercial lending standards.

Private Small Craft Harbor Loan Program

Private Small Craft Harbor Loan Program

FY 2016/17 Budget: **$4,200,000**

Program Update:

- Application deadline: February 1, 2017 (for FY18/19 funding)
- Online applications begin next year (for FY19/20 funding)
- DBW is seeking external assistance to ensure program conforms to commercial lending standards.

Public Beach Restoration Program

Public Beach Restoration Program

Public Beach Restoration Program

Public Beach Restoration Program

FY 2016/17 Budget: **$8,790,000**

Work in Progress: 10 projects

Program Update:

- Application deadline: February 1, 2017 (for FY18/19 funding)
- Online applications begin next year (for FY19/20 funding)
- DBW has recently updated application requirements

Beach Erosion Control Program

Beach Erosion Control Program

FY 2016/17 Budget: **$700,000**

Work in Progress: 4 projects

Program Update:

- Application deadline: February 1, 2017 (for FY18/19 funding)
- Online applications begin next year (for FY19/20 funding)
- DBW has recently updated application requirements

Boating Clean and Green


CALIFORNIA STATE PARKS
BOATING AND WATERWAYS
BOATING
CLEAN & GREEN
CALIFORNIA
COASTAL
COMMISSION

Boating Clean & Green Program

Vivian Matuk
Environmental Boating Program Coordinator

California State Parks Division of Boating and Waterways
California Coastal Commission

(415) 904-6905
vmatuk@coastal.ca.gov

Boating Clean & Green Program

Education and Environmental Services for Boaters

www.BoatingCleanAndGreen.com

CALIFORNIA
COASTAL
COMMISSION

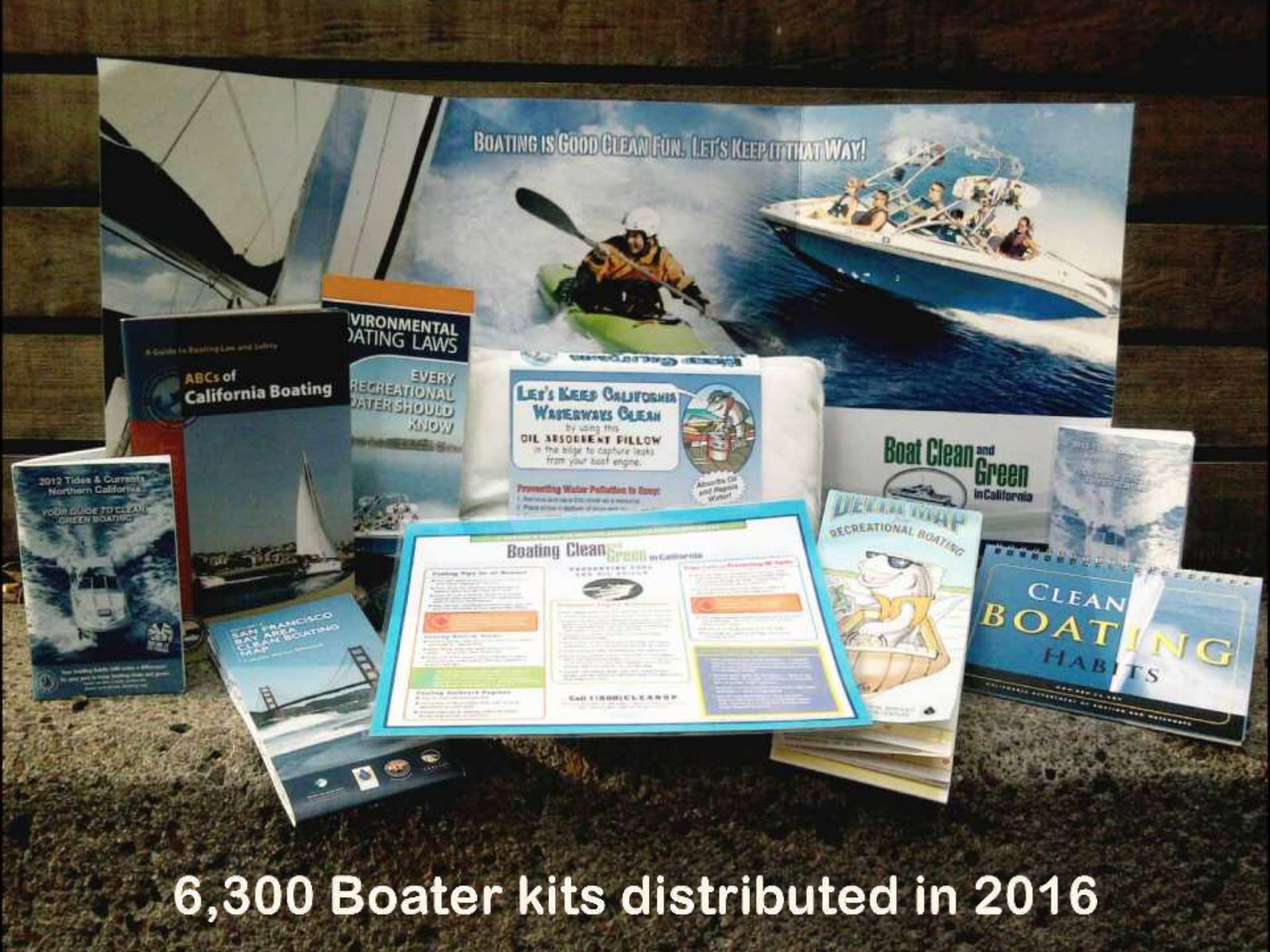
Boating Clean & Green Program

OBJECTIVES:

- **Educate boaters**

- **Provide technical assistance to marinas and local governments**


How Does the Oil Absorbent



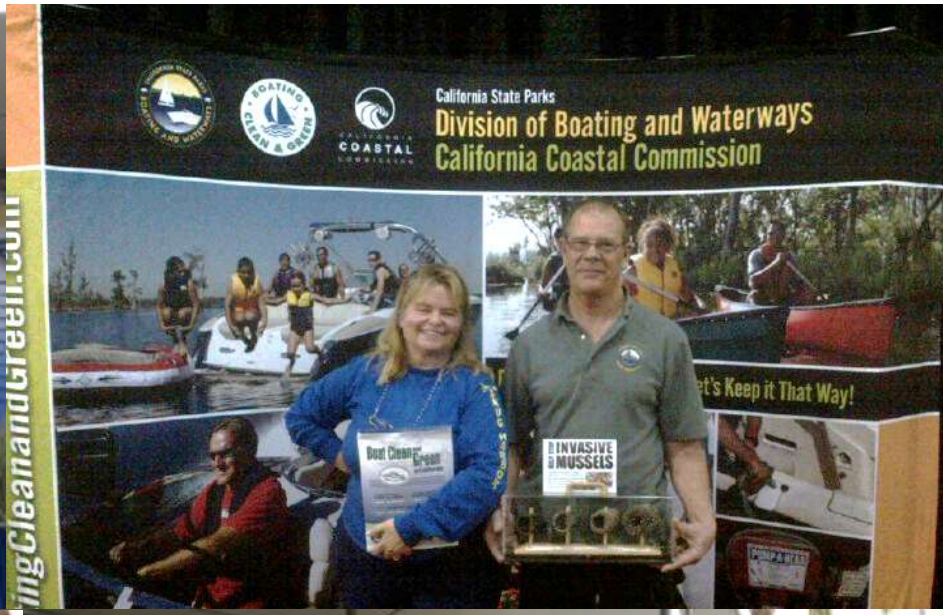
6,300 Boater kits distributed in 2016

Dockwalkers in Action

Volunteers donated over 1,900 hours in 2016

This map shows where boaters live who have learned about clean boating from Dockwalkers and staff in 2016.

Boat Shows & Boating Events



Clean Boating Seminars

6 Clean Boating Seminars, Over 200 Boaters Reached Out

The Changing Tide Newsletter

8,000 copies of each issue distributed

THE CHANGING TIDE
Spring 2016

Check Out These Great Sewage and Oil Related Grants

Contributing Author: Cindy Murphy (Office of Spill Prevention and Response Contract Manager)

Clean Vessel Act (CVA) Sewage Pumpout Installation, Operation and Maintenance Grants

The California State Parks Division of Boating and Waterways (DBW) is the State Grant coordinator for the Clean Vessel Act (CVA) on behalf of the U.S. Fish and Wildlife Service.

The CVA grants fund the construction, renovation, operation, and maintenance of sewage pumpout and dump stations to service recreational vessels. Funding comes from the Sport Fish Restoration and Boating Trust Fund (SFRBTF).

These grants are for both public and private marina facilities. This includes all local governmental entities and private businesses that own and operate boating facilities open to the general public.

Types of Grants:

INSTALLATION GRANT	OPERATION & MAINTENANCE GRANT
This grant will reimburse recipients for up to 75% of the eligible installation cost of pumpout and/or dump stations.	This grant will reimburse recipients for up to 75% of the eligible costs of pumpout parts and labor to maintain an existing pumpout.
Both Grants are **REIMBURSEMENT** based.	
What will it cost you: Grant recipients will be responsible for at least 25% of the costs associated with the new or replacement pumpout and/or dump station installation, or 25% operation and maintenance costs. This 25% match can be cash, the fair market value of any labor or materials provided, or a combination.	
Duration: The grant recipient will guarantee that the granted equipment will be operated, maintained (without cost to DBW), and accessible to all public recreational vessels for the full period of its useful life (7 years).	**Duration:** The term of this grant depends on the term of each grant agreement (between 1–3 Yrs.). Costs will be reimbursed only if incurred during the term of the grant agreement.

Responsibilities as a grantee:

1. All recreational vessels must have access to the pumpout and dump stations funded under this grant program.
2. A visible sign depicting the national pumpout symbol shall be installed.
3. An informational sign should be installed at pumpout and dump stations including: Fees, restrictions, hours of operation, operating instructions, and phone number to call if the facility is inoperable. The sign should also acknowledge funding sources from the SFRBTF, through DBW.
4. While the State encourages the free use of facilities constructed under this program, a maximum user fee of $5 may be charged.

TO APPLY and for more information:
Please contact Ron Kent at (916) 327-1819 or ron.kent@parks.ca.gov
Or visit: www.dbw.parks.ca.gov/?environmental/GAT#/GrantOpportunities.aspx

The California Department of Fish and Wildlife's Office of Spill Prevention and Response (OSPR) Response Equipment Grants

The California Department of Fish and Wildlife's Office of Spill Prevention and Response (OSPR) offers Response Equipment Grants to local government agencies, which includes counties, cities, fire departments, port districts and Tribes throughout California.

This grant provides local agencies and Tribes the ability to pre-position equipment trailers where there is a potential threat of an oil spill occurring within their jurisdiction. In the event of an oil spill, this equipment can be quickly mobilized and deployed to contain the oil spill and protect local resources that are vital to the livelihood of the surrounding community.

The response equipment value is up to $30k and includes 1000' of oil spill containment boom, adsorbent materials, a mobile trailer, and an eight-hour hands-on boom deployment training course.

To learn more about the Grant Program, visit: www.wildlife.ca.gov/OSPR/Response/Response-Equipment-Grants

Sewage pumpout funded by the Clean Vessel Act Pumpout Grant.
Photo: Vivian Matak (DBW/CCC)

A California Clean Boating Network Publication presented by The Bay Foundation, Division of Boating And Waterways, California Coastal Commission, and the Keep the Delta Clean Program. This publication is partially funded by the Division of Boating And Waterways Clean Vessel Act Education Program and the Federal Clean Vessel Grant Act Program. Funded in part by a grant from CalRecycle.

THE CHANGING TIDE
Summer 2016

California Vessel Operator Card Update

Author: Bria Miller, Vessel Operator Card Program, California State Parks Division of Boating and Waterways


Photo: US Coast Guard

California State Parks Division of Boating and Waterways (DBW) has been hard at work developing the California Vessel Operator Card (CVOC) program since the bill creating the education requirements for recreational power boat operators was signed by the Governor in 2014. The Operator Card will be phased in starting January 1, 2018. The Division has established and met with the Technical Advisory Group (TAG), consisting of members who represent different facets of the boating community, including law enforcement, marina operators and educational providers. The TAG advises the Division about the cost of the operator card. The next TAG meeting is scheduled for the fall.

DBW is working to contract with at least two online vendors to provide a NASBLA- and state-approved boating safety education course and examination. The Division plans to work with the Department's IT and Accounting divisions to implement the program. For more information and program updates, please visit the CVOC Web page.

New LED flares minimize your pile of expired flares

We all love a little attention, but when out at sea and something goes awry, getting attention could be the difference between life and death. That is why all vessels longer than 16 feet operating on coastal waters, the Great Lakes, territorial seas and waters directly connected to them (up to the point where the body of water is less than two miles wide) are required to carry Coast Guard approved visual distress signals.

With modern day technological advances, visual distress signal options have expanded. The Sirius Signal SOS Distress Light is currently, the only non-pyrotechnic device approved by the Coast Guard. Operating features for this LED flare include:

- automatic flashing SOS light sequence
- buoyancy if dropped in the water
- illumination for up to 6 hours
- a lifespan of 10,000 hours with fresh C-batteries
- and no release of molten slag so it's safe enough for children to simply turn off and on.

This electric distress light is approved for night time use and only approved for day time use if within three miles of the coastline and accompanied by an orange distress flag.

Continued on back page.

A California Clean Boating Network Publication presented by The Bay Foundation, Division of Boating And Waterways, California Coastal Commission, and the Keep the Delta Clean Program. This publication is partially funded by the Division of Boating And Waterways Clean Vessel Act Education Program and the Federal Clean Vessel Grant Act Program.

Education Through Boating Publications

60,000 Copies

SAN FRANCISCO BAY AREA MARINA DIRECTORY

ENVIRONMENTAL SERVICES

Call Ahead to Verify Services

Location
Cost • Hours

- Sewage Pumpout
- P Port-a-Potty Dump Station
- Used Oil Collection
- F Used Oil Filter Collection
- Oil Absorbent Distribution and Collection
- C Oil Absorbent Collection Only
- Marine Battery Drop-off
- D Oil Absorbent Distribution Only
- B Bilge Pumpout
- Marina Boat Ramp
- Emergency Services Only
- T Tenants Only
- Certified as Clean Marina
- Members-Only Facility

SAN FRANCISCO COUNTY

GRID	NAME	ADDRESS	PHONE
G9	Bay View Boat Club	489 Terry A. Francois Blvd. • San Francisco • 94158	(415) 495-9500
F8	Fisherman's Wharf — Fuel dock, Free • 8 AM-5 PM	Pier 47, end of Leavenworth Street • SF • 94133	(415) 274-0513
G9	Golden Gate Yacht Club	1 Yacht Club Road • San Francisco • 94123	(415) 346-2628
E8	Hyde Street Harbor — Fuel dock, Free • By appointment	2950 Hyde Street (@ SF Marine fuel dock) • SF • 94133	(415) 274-0513
G9	Mariposa Hunters Point Yacht Club	405 Terry A. Francois Blvd. • San Francisco • 94158	(415) 495-9500
E8	Pier 39 Marina — A Dock, Free • 24 hrs.	Beach Street & Embarcadero • San Francisco • 94133	(415) 705-5500
F7	Saint Francis Yacht Club	700 Marina Boulevard • San Francisco • 94123	(415) 563-6363
F7	San Francisco Marina–West Harbor & Gashouse Cove — Pumpout dock (West Harbor)/ Fuel dock (Gashouse Cove), Free • 24 hrs.	3950 Scott Street • San Francisco • 94123	(415) 831-6322
G9	South Beach Harbor — East end of north and south guest docks • Free • 24 hrs.	Pier 40, The Embarcadero • San Francisco • 94107	(415) 495-4911
G3	Treasure Isle Marina — South end of D Dock, Free • 24 hrs.	1 Clipper Cove Way • San Francisco • 94130	(415) 981-2416


SAN FRANCISCO BAY AREA CLEAN BOATING MAP
NOT INTENDED FOR NAVIGATION
Downtown Napa Main Street Dock
John F. Kennedy Park
Cuttings Wharf
Napa Valley Marina
Downtown Suisun City
Solano Yacht Club
Suisun City Marina
FAIRFIELD
SUISUN CITY
CORDELIA
POTRERO HILLS
Rush Ranch Preserve
Suisun Marsh
Slough
Montezuma
Grizzly Island Wildlife Area
Grizzly Bay
SUISUN BAY
Honker Bay
COLLINSVILLE
Napa River
AMERICAN CANYON
Napa County
Solano County
Skaggs Island
San Pablo Bay National Wildlife Refuge
VALLEJO
Vallejo Municipal Marina
Vallejo Yacht Club
Mare Island Strait
Glen Cove Marina
Benicia State Recreation Area
West 9th Street Launch Ramp
Benicia Marina
Carquinez Strait
Martinez Marina
Pittsburg Marina
SAN PABLO BAY
CROCKETT
RODEO
BENICIA
N
0 5 Miles
0 5 Kilometers
Learn more about the San Francisco Bay Area Water Trail at http://sfbaywatertrail.org.
Learn more about Clean Marinas at www.cleanmarina.org

PROTECT YOUR PLAYGROUND
WHAT YOU CAN DO TO PREVENT POLLUTION

PREVENT OIL AND FUEL CONTAMINATION

Oil, fuel and other petroleum products are considered to be toxic to human health and aquatic life. Help prevent pollutants from entering San Francisco Bay by practicing preventive engine maintenance and by using oil absorbents.

LOOK ON THE MAP FOR MARINAS WITH THESE ICONS:

- Used Motor Oil Collection Center
- Absorbent Exchange Program

Spill Proof Your Oil Changes and Recycle Used Motor Oil

1. **PREVENT DRIPS AND SPILLS** by using oil-only absorbents to catch spills and drips from the nozzle, air vent, and fuel filler fitting.
2. If you change your own oil use a closed system--a portable vacuum oil change pump that drains into a container that is closed to prevent spills during transfer of oil (available at most marine supply stores).
3. **DO NOT MIX USED MOTOR OIL WITH ANYTHING.** Keep it separated for recycling.
4. Recycle used motor oil and oil filters at a used oil collection facility or marina providing this service. See on the map for locations near you.
5. **NEVER USE SOAPS OR DETERGENTS TO CLEAN OIL OR FUEL THAT HAS SPILLED!** Adding soap is **ILLEGAL** and contaminates the water.

Prevent Pollution From Your Engine

1. Practice preventive engine maintenance. Keep the engine well tuned and operating efficiently.
2. Choose Coast Guard-approved alcohol-resistant fuel lines.
3. Avoid using solvents or toxic chemicals to clean engine parts. Use mechanical means (such as hand-scraping caked oil) or less toxic solvents (water-based). DO NOT LET SOLVENTS RUN INTO THE BILGE.
4. Transfer and remove fluids with care using funnels, pumps and absorbents to eliminate drips and spills.
5. Use oil-only absorbents in the bilge to capture unexpected leaks.

Oil-Only Absorbents

Image source: Keep the Delta Clean Program

Absorbent Sheet | Absorbent Pillow | Absorbent Sock

1. Use oil-only absorbents in the bilge to capture small leaks and drips from your engine. The absorbents will capture oil before the bilge pump discharges it into the water.
2. Oil-only absorbents absorb oil while repelling water and are the least expensive method boaters can use to control oily discharge.
3. PRECAUTIONS | When using absorbents in the bilge, secure them to prevent clogging or fouling the bilge pump and the bilge pump float or sensor. Oil and fuel are flammable. Keep oil and fuel-saturated absorbents away from heat, sources of ignition and in a well-ventilated area.
4. OIL ABSORBENT EXCHANGE PROGRAM | Look for the marinas on this map with this icon that actively distribute and collect oil-only absorbents for free as a way of reducing oil discharges from boats.

SAFELY DISPOSE OF HAZARDOUS WASTE

Boaters use many products to clean and maintain their boats. Many cleaning and maintenance products are by law considered hazardous waste once they are no longer needed, such as used motor oil and oil filters, antifreeze, all batteries, oil/fuel-saturated absorbents, solvents, paints, zincs, varnishes, cleaning products, fluorescent lights, and propane tanks.

TO CONVENIENTLY AND SAFELY DISPOSE OF USED MOTOR OIL, OIL FILTERS, OIL ABSORBENTS, AND MARINE BATTERIES, LOOK ON THE MAP FOR MARINAS WITH THESE ICONS:

- Used Oil Collection
- Oil Absorbents
- Bilge Pumpout
- Used Oil Filter Collection
- Marine Batteries

1. Use of the products listed above can result in spills and leftover products that require safe disposal. Seek safer alternatives in the book ABCs of California Boating, page 47 (Green Boating Guidelines), or at **www.goodguide.com.**
2. IT IS ILLEGAL TO THROW HAZARDOUS WASTE IN THE TRASH OR ABANDON IT. Some boating products contain hazardous ingredients that are toxic to human health and aquatic life and must be disposed of safely.
3. For disposal, see list of Household Hazardous Waste (HHW) Disposal Facilities in the Bay Area next to the map, or call 1-800 CLEANUP (253-2687), or visit **www.earth911.com** for more information and other waste disposal options in your area.
4. Check stored products every six months and properly dispose of those that are old or unnecessary.
5. HHW facilities offer free recycling services for residents, and periodic one-day recycling events. Call to confirm information and hours of operation.
6. Some marinas offer used motor oil, filter, and absorbent disposal. Contact your marina operator.
7. Recycle your zinc anodes at a local scrap metal recycler.
8. Refer to www.shoreenvironment.org for information on safer cleaning without the use of toxic chemicals.

Cover photo | The Golden Gate Bridge from Baker Beach, San Francisco, Cynthia Barnhart.
Upper left corner | Sailboat on the water, Vivian Mahdi.
Center panel | Top: Pelicans against the sunset over Ocean Beach, San Francisco, Joan Oleiro. Bottom: Sailboat Isle Marina in Alameda, Vivian Mahdi.
Product photos © San Francisco Department of the Environment.
Right panel, top right | Antioch Marina, Vivian Mahdi.
Bottom right | Richardson Bay, Joan Oleiro.
Left | Sea gulls and sea lions at Pier 39, San Francisco, Vivian Mahdi.

Map research and writing: Vivian Mahdi and Melissa Berkowitz, California State Parks Division of Boating & Waterways and California Coastal Commission; and Cynthia Barnhart, San Francisco Department of the Environment.

References:
California Department of Boating and Waterways and California Coastal Commission. 2008. A Boater's Guide to Keeping Pollutants Out of the Water.
Keep the Delta Clean Program. 2007. Sacramento-San Joaquin Delta Map for Recreational Boating.

MINIMIZE SEWAGE IMPACTS

Over one hundred different intestinal pathogens such as viruses, bacteria and parasites can be found in sewage that may harm humans, wildlife and drinking water. Look on the map for marinas that have sewage pumpout and port-o-potty dump stations.

LOOK ON THE MAP FOR THESE ICONS:

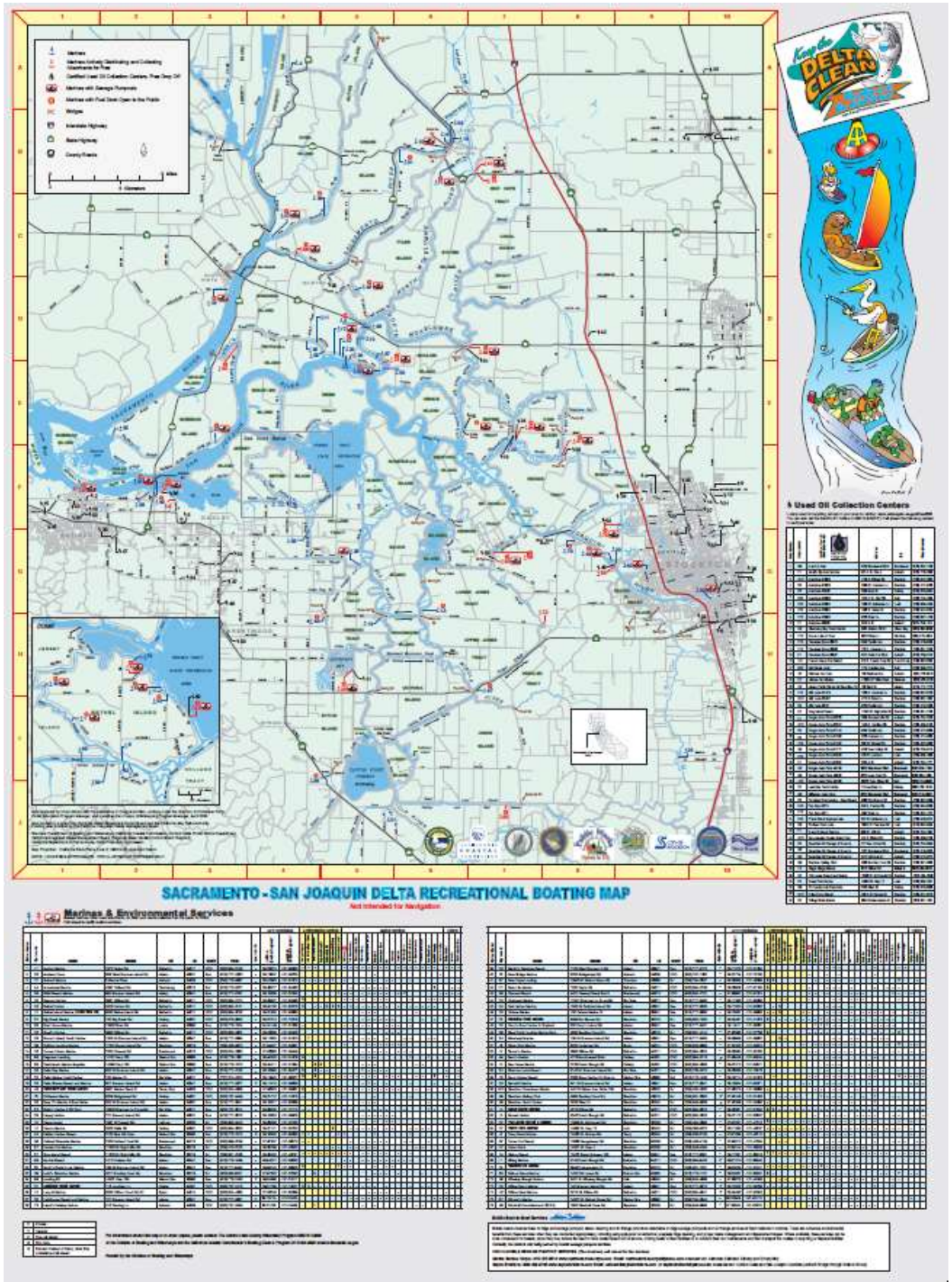
- Sewage Pumpout
- Port-a-Potty Dump Station

Or scan QR code for pumpout locations

1. It is illegal to discharge raw sewage within the navigational waters of the U.S. (an area that includes the entire San Francisco Bay and Delta and extends 3 miles seaward beyond the coast) and in national marine sanctuaries.
2. Discharges of any kind, treated or not, are prohibited in Richardson Bay (a Federally-designated no-discharge area).
3. All boats with an installed toilet must have a Coast Guard approved Marine Sanitation Device (MSD) if operating in US navigable waters.
4. Do not discharge treated waste from Type I or II Marine Sanitation Devices (MSDs) and untreated waste while in a marina or yacht harbor, swimming/wading areas, lakes, reservoirs, or freshwater impoundments; rivers that do not support interstate traffic, or into a Federally-designated no-discharge zone such as Richardson Bay. If operating in these waters, your Type I or Type II MSD must be connected to a holding tank or secured to prevent any sewage discharge.
5. Visit www.dnrec.ca.gov to find additional sewage pumpout locations near you.
6. Avoid holding tank disinfectants and deodorizers that contain chlorine, formaldehyde or other components that can be harmful to aquatic organisms.
7. To clean and deodorize the head use a mix of ½ cup of baking soda per half gallon of water, and sprinkle baking soda around the rim.
8. Keep the "Y" valve properly secured in a closed position (use a padlock or wire tie) when navigating inland waters or less than three miles off shore to prevent accidental discharges.
9. Consider using a mobile pump-out service. See list of mobile services on the back panel of this map.

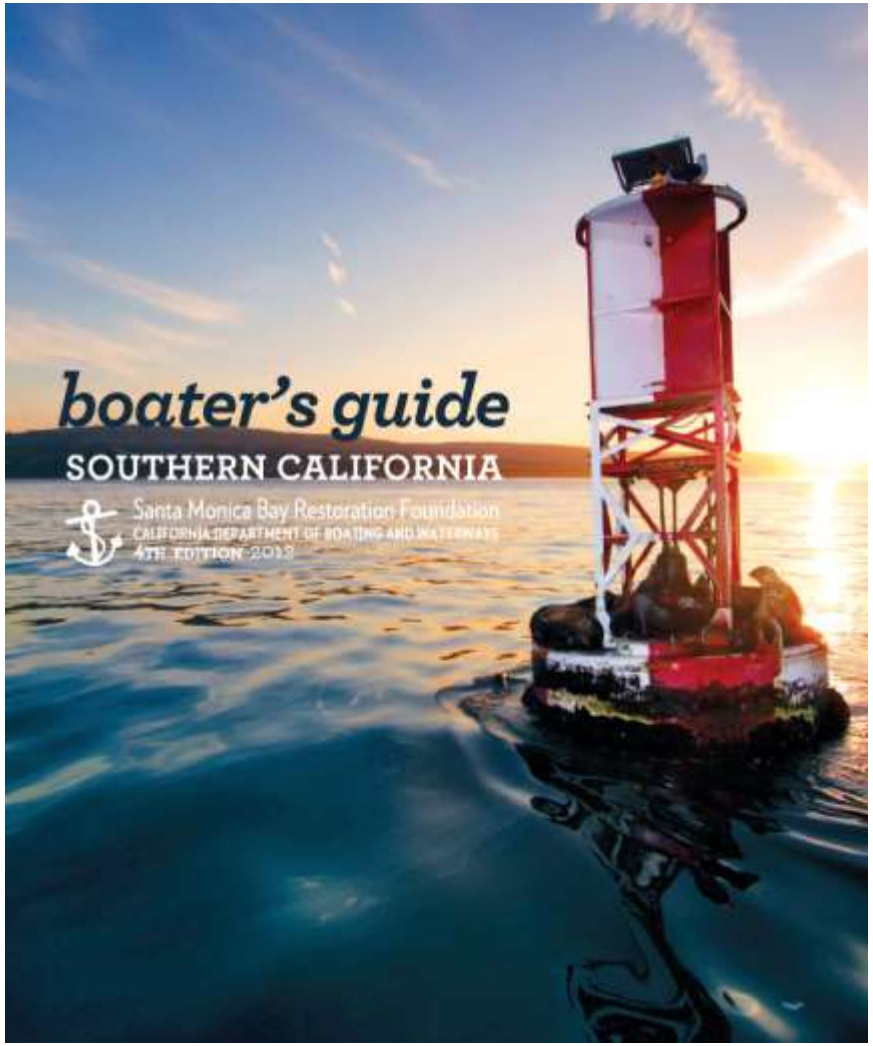
PREVENT MARINE POLLUTION

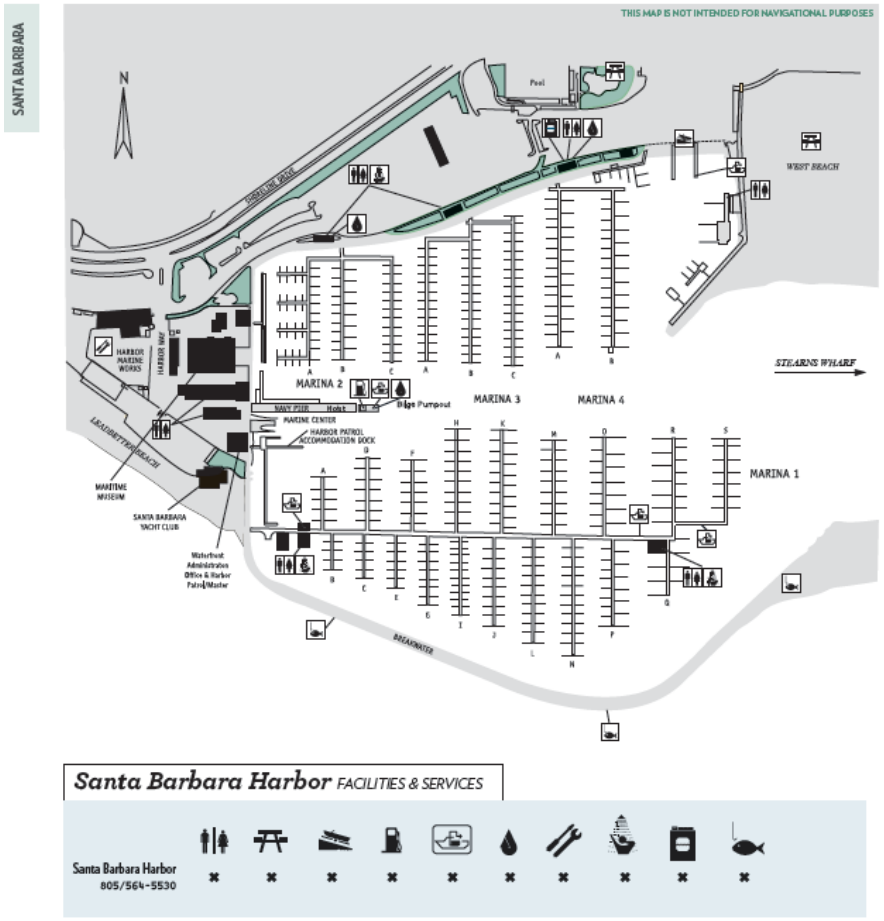
1. Stash your trash on board in a designated trash bin and save cans, bottles, plastics and paper for recycling.
2. Avoid plastic bags and carry a reusable canvas bag. Bring plastic bags to a supermarket for recycling.
3. Remove product packaging at home. Pack your food in reusable containers.
4. Cigarette butts are the most common type of litter found washed up on beaches and are not biodegradable. Place extinguished cigarette butts in the trash.
5. It is illegal to throw plastics and garbage containing plastic overboard.
6. It is illegal to dump any garbage overboard into the navigable waters of the state (including inland waters and up to 3 miles from shore).
7. Take used monofilament fishing line back to a recycling bin at a participating boating facility. Visit www.BoatingClean&Green.com (click on "Monofilament Fishing Line Program") to identify a location near you. Or, send your monofilament fishing line directly to: Pure Fishing, 1000 10th St., Spirit Lake, IA 51360-1000, tel. (800) 237-3330.



90,000
Copies

Education Through Boating Publications





7,930 Copies

What is the difference between biocide hull paint and non-biocide hull paint?

Biocide hull paints are toxic and act similarly to pesticides that prevent infestations of insects or weeds on your lawns.

Biocide paints contain copper or zinc or other active ingredients (e.g., Econea or Irgarol) to prevent fouling on boat hulls. However, biocide paints are also known to be toxic to marine organisms.

Non-biocide paints do not contain active ingredients, making them more environmentally friendly. These paints are typically made of silicone, ceramic or epoxy materials.

Marinas in Southern California impacted by copper pollution include Marina del Rey, Newport Bay, and Shelter Island Yacht Basin. For more information on the regulations and requirements in these areas, contact the local Regional Water Quality Control Board.

Marina del Rey
LOS ANGELES REGION (4)
http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/

Newport Bay
SANTA ANA REGION (8)
http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/tmdl_metals.shtml

Shelter Island Yacht Basin
SAN DIEGO REGION (9)
http://www.waterboards.ca.gov/sandiego/water_issues/programs/watershed/sowatershed.shtml#siybtmdl

This material was prepared by the Port of San Diego, in collaboration with the County of Los Angeles, Department of Beaches and Harbors, the California State Parks Division of Boating & Waterways, and the California Coastal Commission.

BOATER'S GUIDE TO USING HULL PAINT IN CALIFORNIA

Are you looking to re-paint your boat hull?

Selecting a paint for your boat is far from a one-size-fits-all strategy. Key considerations include available hull paints, paint longevity, cleaning needs, and potential environmental concerns.

Copper is commonly used in hull paint to slow or stop the growth of marine life (fouling) on boat hulls by releasing copper (leaching). However, copper hull paints have been identified as the largest source of copper pollution in marinas.

Be a part of the solution! Use this guide to select a hull paint that eliminates (e.g., non-biocide paints) or reduces (lower leach rate copper paints) the release of copper into the local waters.

BOATER'S GUIDE TO USING HULL PAINT IN CALIFORNIA

PAINT OPTIONS

Non-Biocide Paints

The most environmentally friendly approach

- Hull paints that *do not* contain metals (such as copper or zinc) or other active ingredients
- Estimated average useful life[2]: 5-10 years
- Recommended cleaning: Every 2 to 4 weeks (frequency and method vary by product and season)
- Long term benefits include longer useful life (reduced haul outs). This may offset higher up-front application cost when compared to copper paints.
- **Use of non-biocide paints is encouraged statewide, especially in waters impacted by copper pollution.**

Paint Examples*
- International Paint Intersleek 900
- Interlux VC Performance Epoxy
- Ram Protective Coatings CeRam-Kote

Non-Copper Biocide Paints

- Hull paints containing zinc or other non-copper active ingredients (e.g., Econea) to prevent marine growth on boat hulls.
- Estimated average useful life[2]: up to 2 years
- Recommended cleaning: Every 3 to 4 weeks (frequency and method vary by product and season)
- Non-copper biocide paints do not result in the release of copper. However, these paints release other active ingredients that may lead to future water quality impacts.

Paint Examples*
- Epaint Ecominder
- Interlux Interspeed 5640
- Petit Hydrocoat Eco
- Sherwin Williams Seaguard HMF

Lower Leach Rate[1] Copper Paints

- Hull paints with leach rates at or below 5.5 µg/cm²/day
- Estimated average useful life: 2-3 years
- Recommended cleaning: Wait a minimum of 90 days after applying new hull paint before initiating cleaning. Boaters are encouraged to clean these hull paints only when needed, no more frequently than once every 30 days.[4]
- **Use of lower leach rate copper paints is encouraged statewide, especially in waters impacted by copper pollution.**

Paint Examples*
- Nautical Super ProGuard
- Petit Trinidad Pro
- Petit Vivid Antifouling Marine Paint
- Seahawk Sharkskin

Higher Leach Rate[1] Copper Paints

Use of higher leach rate copper paints is discouraged statewide

- Hull paints with leach rates above 5.5 µg/cm²/day
- Estimated average useful life: 2-3 years
- These paints may be discontinued in the future due to leaching concerns.
- Frequent and aggressive cleaning of higher leach rate copper paints is discouraged, as cleaning increases the release of copper into the water.

Paint Examples*
- Interlux Ultra
- Kop-Coat ZSpar The Protector VOC
- Sherwin Williams Pro-line 1068

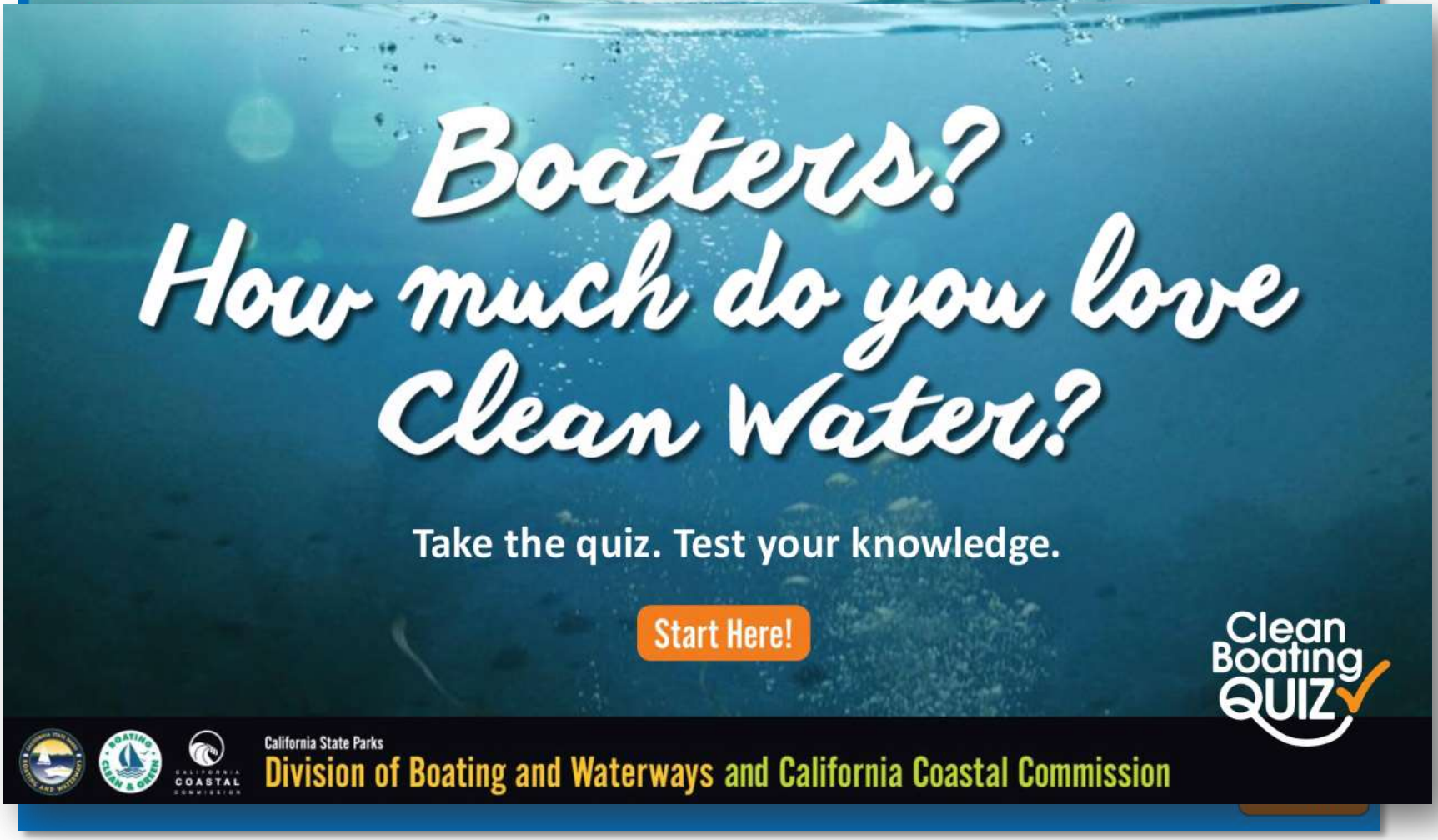
[1]California Department of Pesticide Regulation (DPR) has categorized registered copper paints into two categories (≤5.5 and >5.5 µg/cm²/day) based on their product-specific leach rates.
[2]Hull paint life expectancies based on paint manufacturers' claims.
[3]Cleaning frequency recommendation based on use of soft-pile carpet for hull cleaning and Southern California fouling conditions.
[4]Paints are listed by manufacturer and paint name. Paint examples represent products known to be used by California boatyards.

The mention of trade names or commercial products here does not constitute endorsement or recommendation for use.

For a more complete list of available copper hull paints and more information on DPR's mitigation efforts, visit the website: http://www.cdpr.ca.gov/docs/registration/reevaluation/chemicals/antifoulant_paints.htm

January 2016

CLEAN & GREEN PILOT QUIZ



PILOT QUIZ RESULTS

- ✓ **767 quiz attempts (completing one or more questions) - goal was 200 –**
- ✓ **452 completions – 59%**
  - ✓ **210 Passed the quiz, 46.4% pass rate**
  - ✓ **242 – Failed the quiz, 53.6% failed rate**
- ✓ **315 incompletes – 41%**

Where did they come from?

92%
Social Media Ads

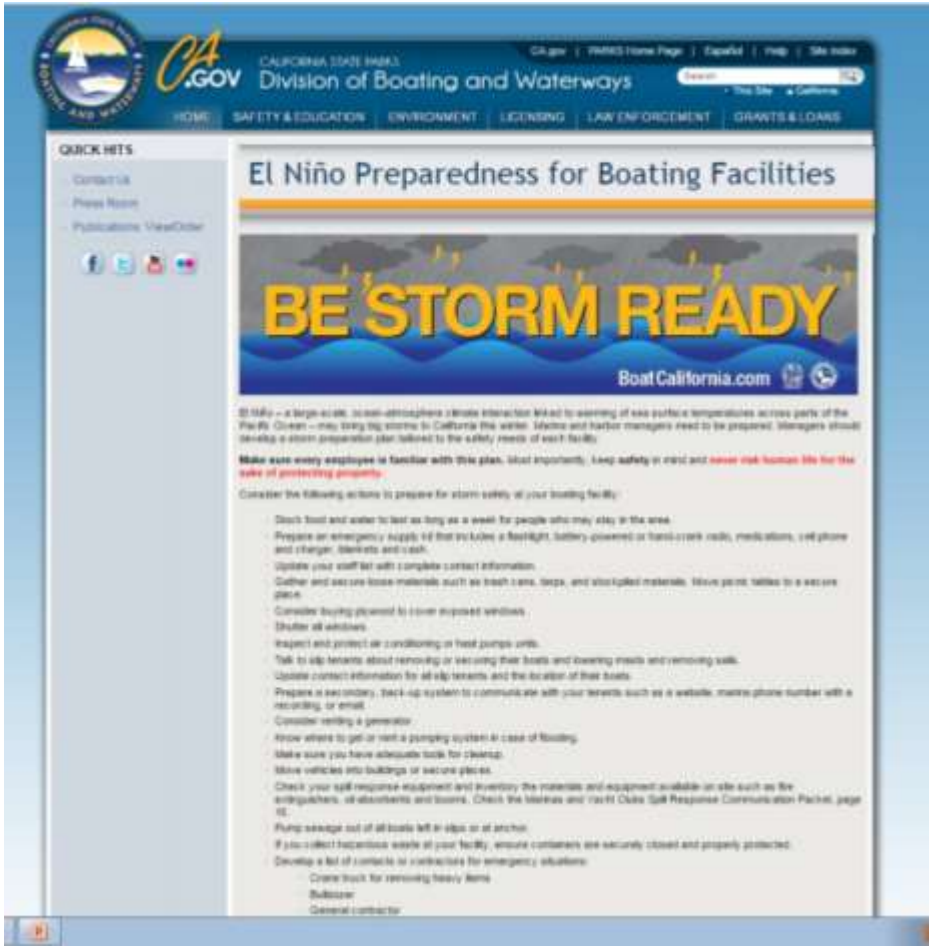
8%
Digital Banners

<1%
Email

Feedback From Quiz Respondents

* *Thank You! Yes I did absolutely learn from the quiz, there were a few questions I really didn't know that I probably should have. But I do now thanks to you!*
* *Yes, I did learn quite a bit!*
* *Yes - I've been boating for many years and didn't know quite a bit!*
* *Yes, I did cleared up some things I thought I had known*

Communicating Resiliency in Our Educational Efforts



Technical Assistance

Marinas & Yacht Clubs
Spills Response Communication Efforts

Workshops

- **SF Bay and Delta**
- **San Diego**
- **Los Angeles/Long Beach**
- **Orange County**
- **Delta**

Marinas and Yacht Clubs Spill Response Communication Packet

Partnering Organizations

Aquatic Invasive Species

3 WORKSHOPS

77 PARTICIPANTS

Collecting & Recycling Fishing Line

Courtesy of USCG

Courtesy of Take Me Fishing

226 Fishing Line Recycling Stations

Monofilament Fishing Line Stations

Antioch/Oakley Shoreline Park

Antonelli Pond

Arrowhead Marsh Fishing Pier, Oakland

Barrett Cove Marina

Bay Farm Island, Alameda

Ballena Blvd., Alameda

Ballena Bay Point

Bay Farm Island Pier, Alameda

Bay Point Shoreline Park

Berkeley Marina

Berkeley Pier 1

Berkeley Pier 2

Big Bear Lake - East Ramp

Big Bear Lake - West Ramp

Big Break Marina 1

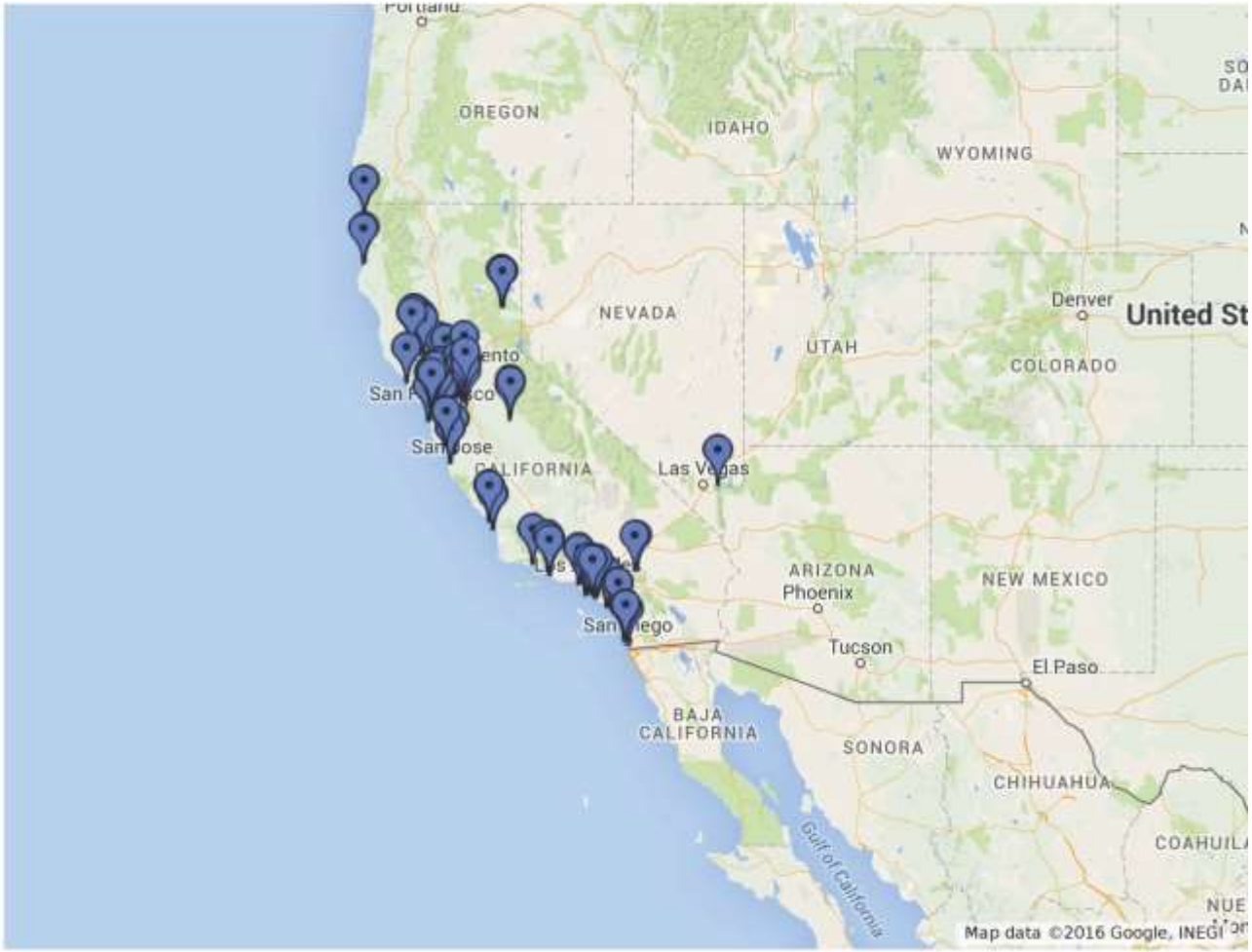
Big Break Marina 2

Big Break Shoreline Park

Brisbane Marina

Bullfrog Marina

Caliente Yacht Harbor



This map depicts the CA Monofilament Fishing Line Recycling Stations established by the CA State Parks Division of Boating & Waterways and the CA Coastal Commission. The contact information in each entry below belongs to the facility managing the fishing line recycling station. Specific station locations are found at the bottom of each location.

Collecting & Recycling Fishing Line

Portable Fishing Line Containers

40 Groups Developed 2,200 Portable Containers

Onboard Fishing Line Containers

Charter vessel, ***Stardust*** and its on-board collection container

20 on board fishing line collection containers

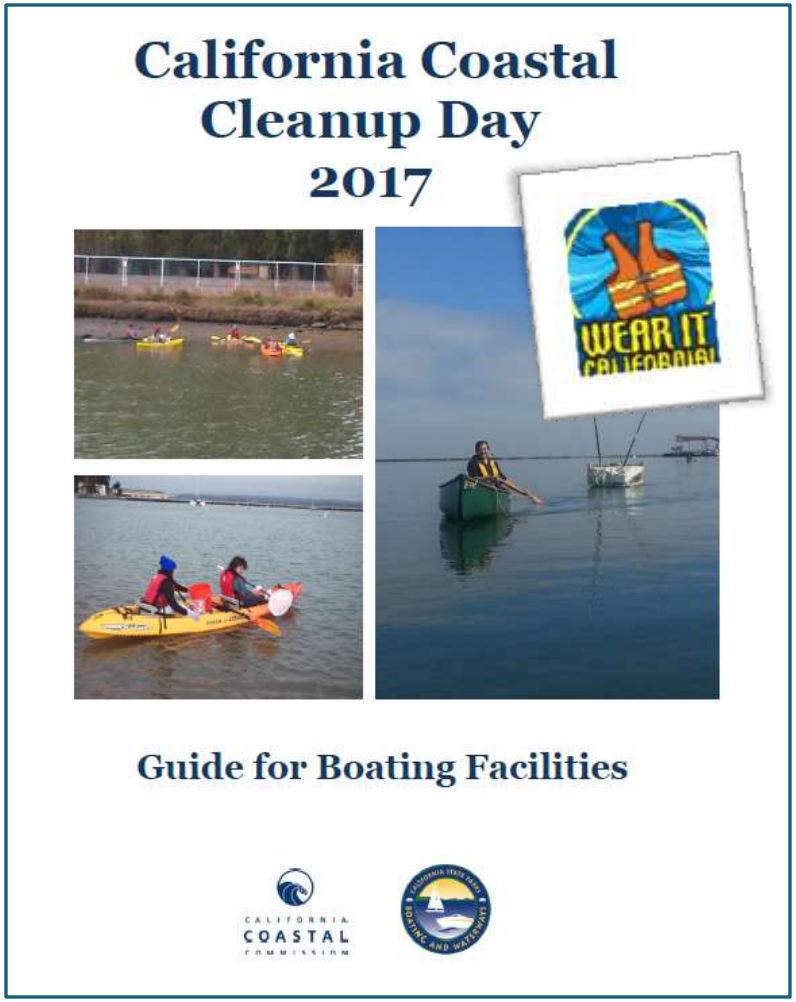
Partnership with 16 charter companies

Coastal Cleanup Day and Boaters

- 34 facilities participated
  - 864 volunteers total
  - 17,249pounds of debris removed from shoreline and by watercraft
  - 64 non-motorized vessels

Statewide counts: 63,645 volunteers who picked up a total of 1 M pounds

Resources


California Coastal
Cleanup Day
2017
WEAR IT
Guide for Boating Facilities
CALIFORNIA
COASTAL

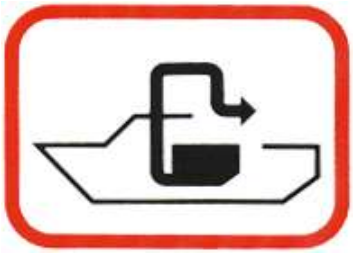
Program Endorsed by Boating Leadership

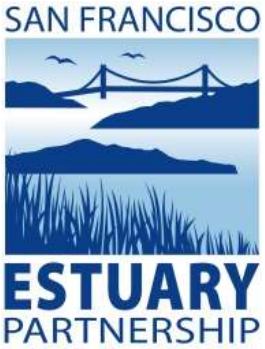
- ✓ **Pacific Inter-Club Yacht Association**
- ✓ **Southern CA Yachting Association**
- ✓ **Harbor Associations**
- ✓ **Clean Marinas California Program**

✓Participation in Coastal Clean Up Day counts towards the nomination of the Club of the Year under the community service category and

✓Provides points to marinas towards the Clean Marina Certification or Recertification

DBW's Clean Vessel Act Education and Outreach Program





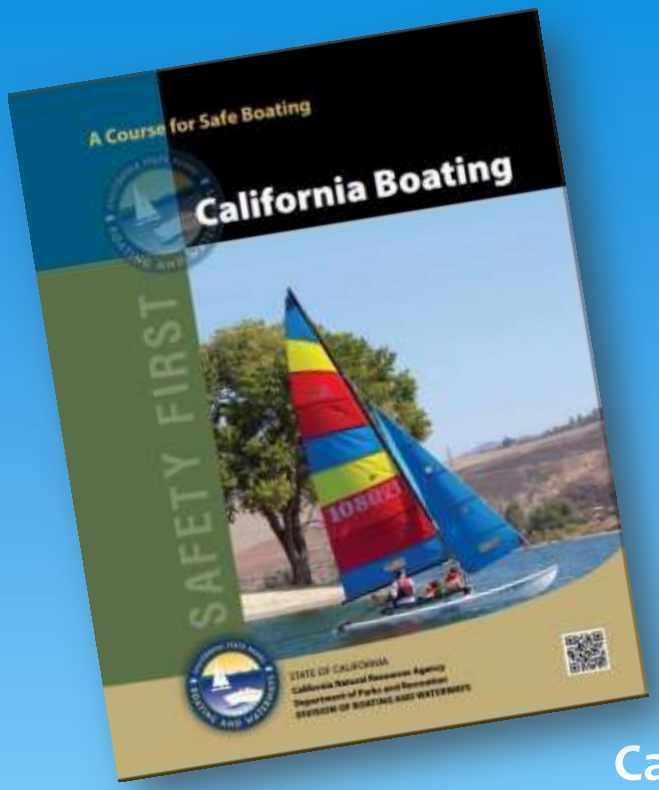
Funding Provided by U.S. Fish and Wildlife Service, Sport Fish Restoration and Boating Trust Fund

Visit our website:

www.BoatingCleanAndGreen.com

Vivian Matuk
Environmental Boating Program Coordinator
California State Parks Division of Boating and Waterways
California Coastal Commission
(415) 904-6905
vmatuk@coastal.ca.gov

CALIFORNIA COASTAL COMMISSION



Education & Safety

California State Parks
Division of Boating and Waterways

DBW Commission Meeting – November 9, 2016, Sacramento

Presentation Order

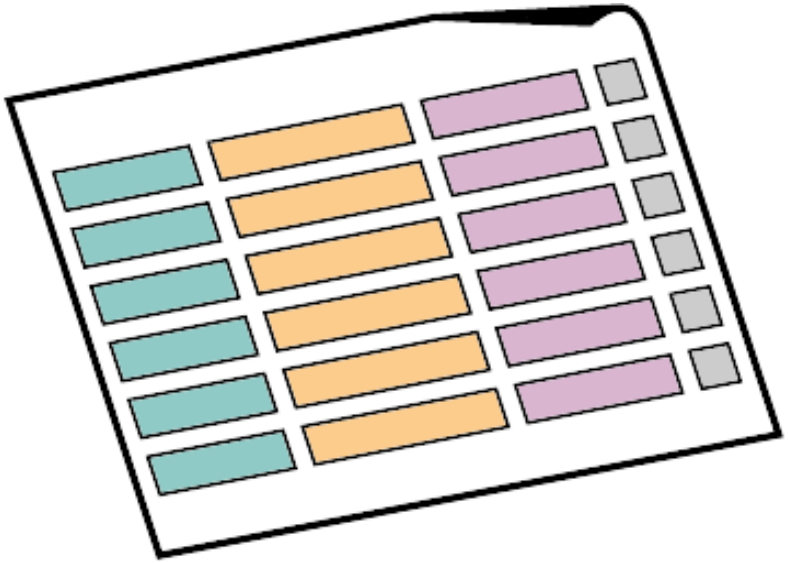
1. Boating Accident Program
2. Aquatic Center Program
3. Boating Safety Course
4. Boating Safety and Life Jacket Outreach Programs
5. Boating Safety and Environmental Awareness Multimedia Campaign

Boating Accident Program

Challenges

* Federally Mandated Program
* Required to report to the USCG
* Non-centralized law enforcement

Recent News



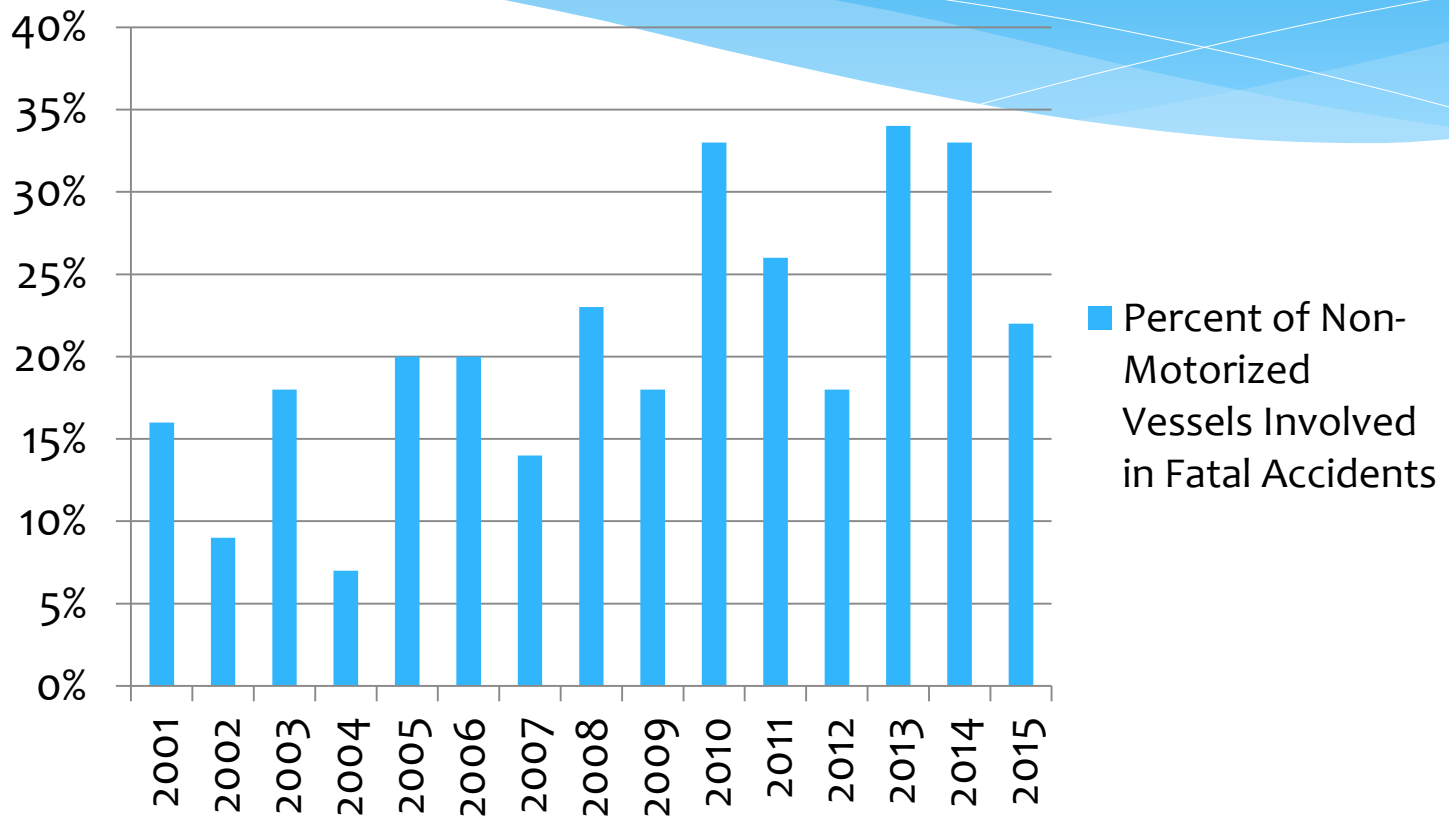
* New database ready for 2017
* State law changes to accident reporting
* NASBLA committee work on accident analysis and trends

Boating Accident Statistics

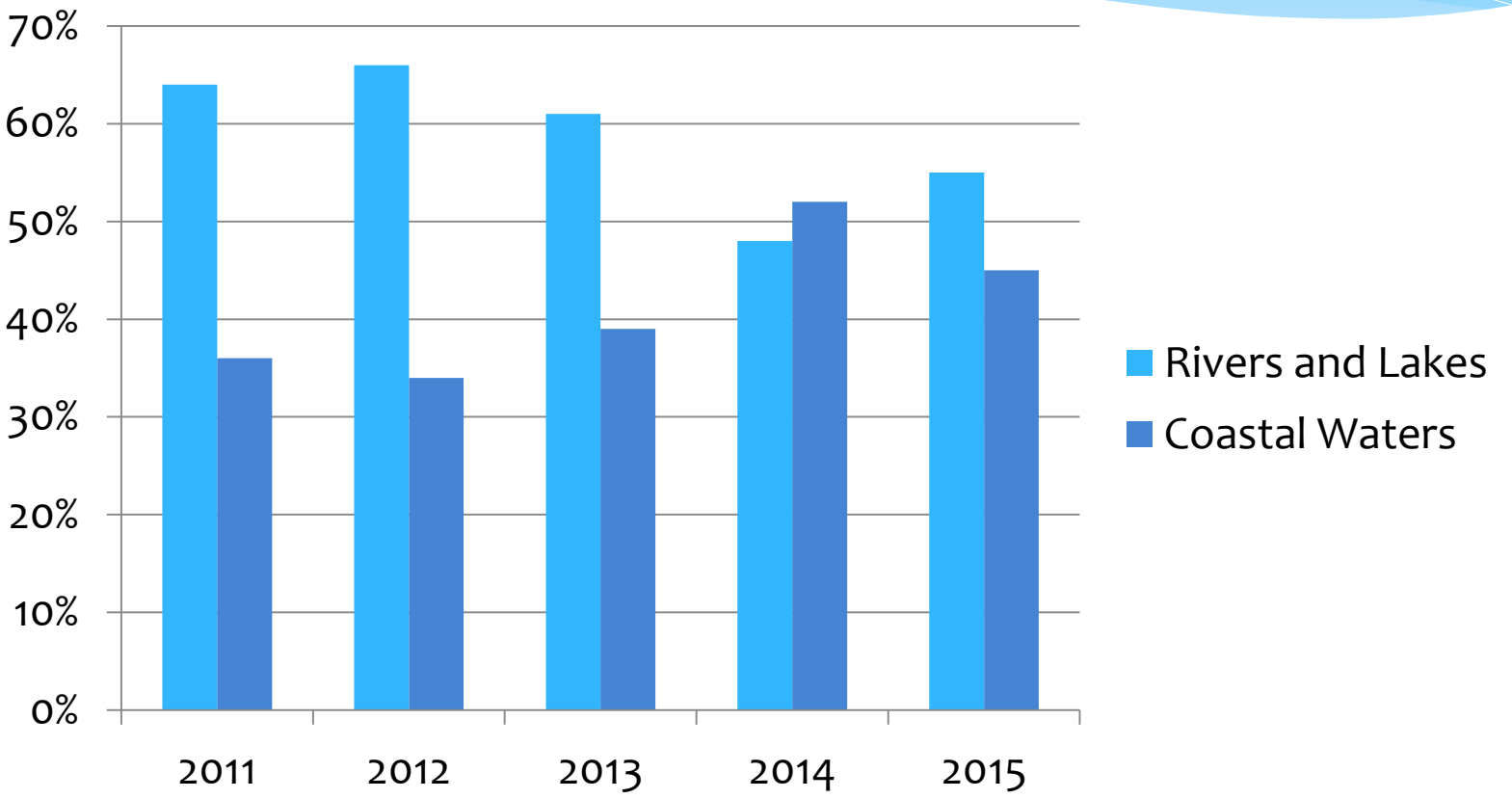
* **2015:** Accidents - **503** Injuries - **232** Fatalities – **49**
* **65%** of the victims who drowned were **NOT** wearing life jackets.
* Alcohol fatalities: **37%** when testing conducted
* Paddlecraft fatalities: **22%**
* Fishing fatalities: **16%**
* **37 fatalities so far in 2016**

Non-Motorized Trends

Percent of Non-Motorized Vessels Involved in Fatal Accidents



Recent Trends



Aquatic Center Program

Aquatic Center Program

47 Active Partnerships…

…from Humboldt to San Diego

20 Colleges and Universities
9 Cities and Counties
18 Non-profit Organizations

Aquatic Center Program

- Equipment
- Scholarships
- Instructor Training
- National Safe Boating Week

Aquatic Center Program

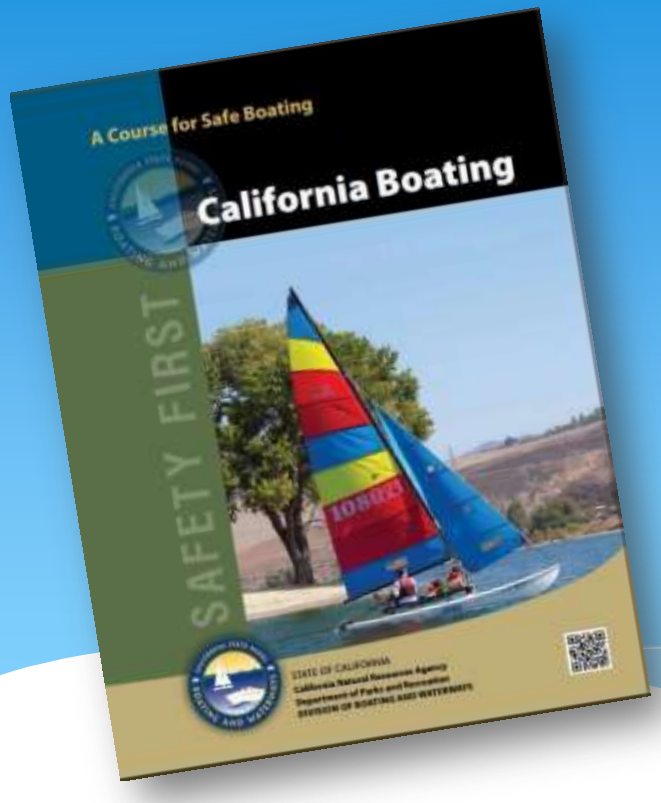
IMPACT:

- *$1.3 million granted*
- ***60,000 students***
- *5,000+ courses*
- ***90,000 contacts at events***

Aquatic Center Program

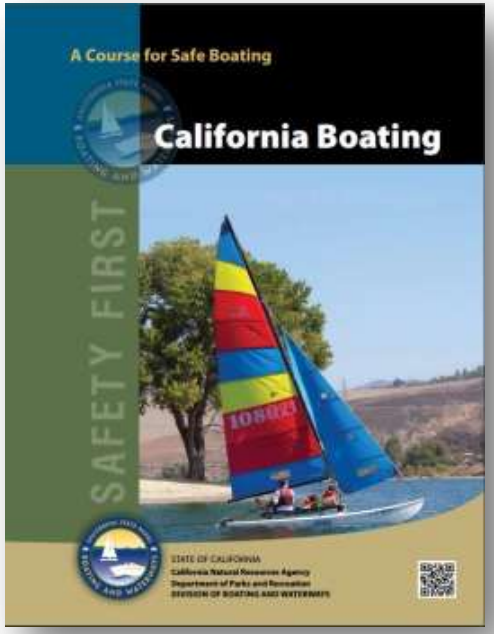
New in 2016

- Program Changes
- Partnership Innovations
- Geographic Expansions
- Other Partnership Benefits



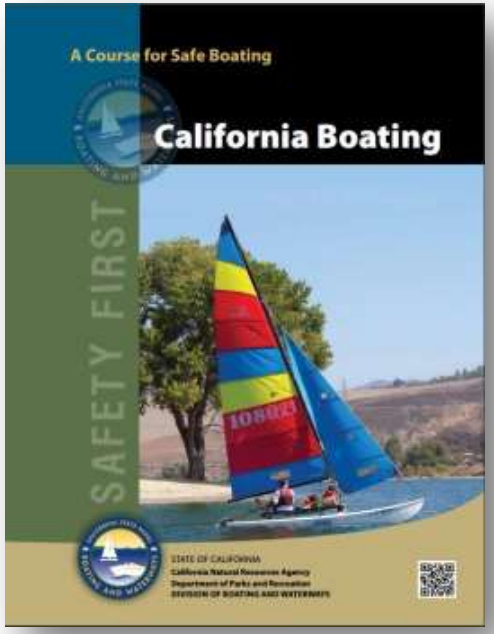
Boating Safety Course

California Boating:
A Course for Safe Boating



* Eight hour home study course and multiple choice exam
* Teaches state and federal requirements
* NASBLA-approved (next renewal: 2017)
* Course is approved for Boater Card eligibility
* Online Ordering System, Partners assist with distribution
* Free to the public

California Boating:
A Course for Safe Boating



2016 DBW Boating Safety Course Statistics

* *13,529 course books ordered throughout the state*
* *1,206 passing scores since January 1, 2016*
* *Average score is 53/60*
* *93% of total students have passed*

Outreach and Education

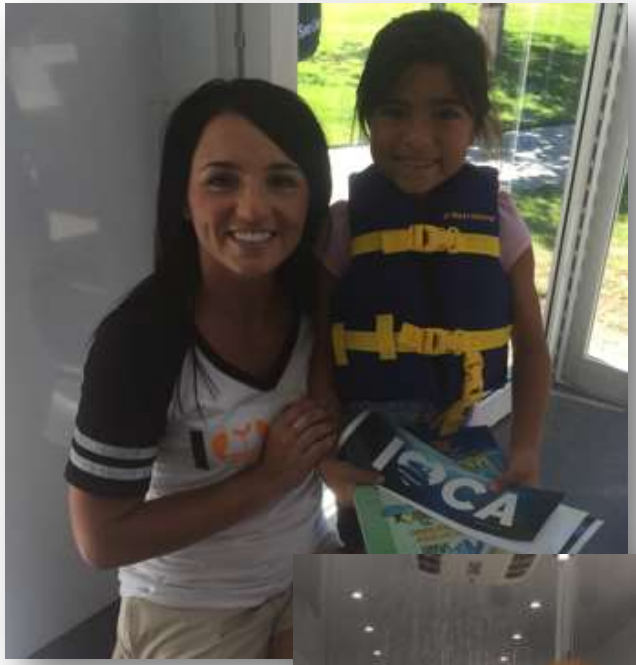
Outreach and Education

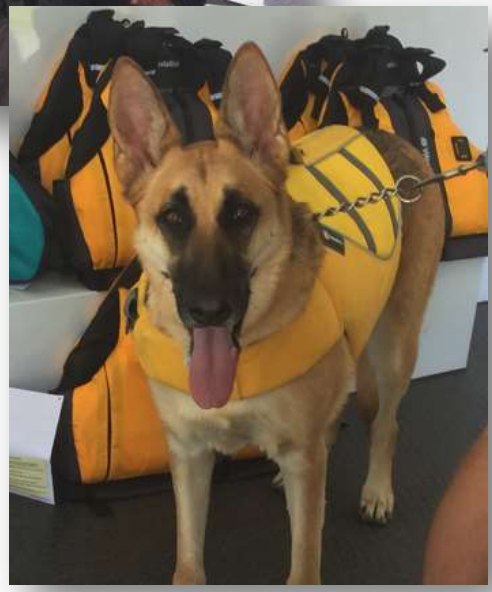
* Outreach Events
* Life Jacket Programs
* Youth Education

Outreach Events


Love CA. Boat CA. Save CA.
Love CA
Boat CA
Save CA

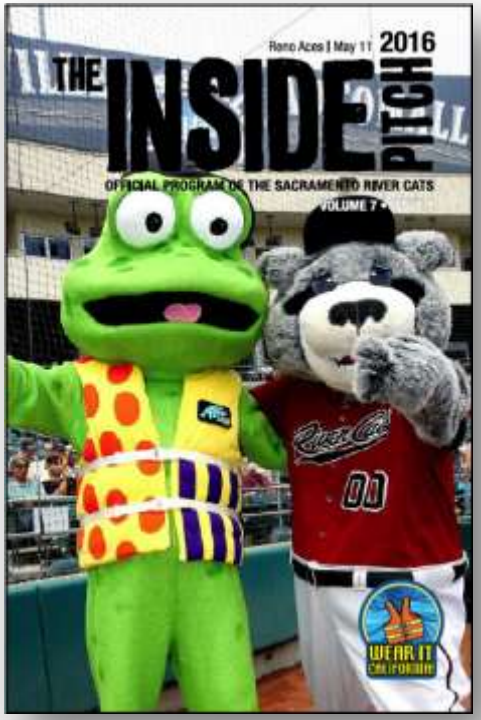
Life Jackets Programs

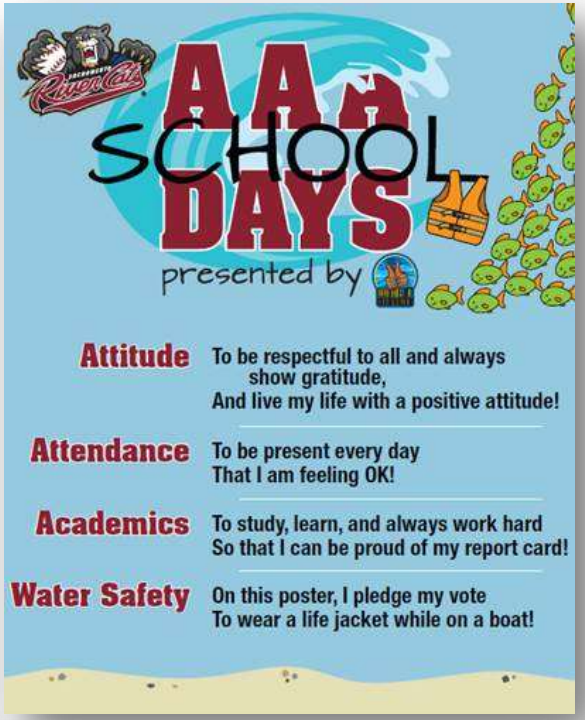





1
STATE PARKS
LIFE JACKET
LOAN STATION

Youth Education


Reno Aces | May 11 2016
THE INSIDE PITCH
OFFICIAL PROGRAM OF THE SACRAMENTO RIVER CATS
VOLUME 7
WEAR IT CALIFORNIA


AAA SCHOOL DAYS
presented by
Attitude
To be respectful to all and always show gratitude,
And live my life with a positive attitude!
Attendance
To be present every day
That I am feeling OK!
Academics
To study, learn, and always work hard
So that I can be proud of my report card!
Water Safety
On this poster, I pledge my vote
To wear a life jacket while on a boat!


RALEY FIELD
3 KCRA
KQCA my 58
JESSUP
IQCA Take the quiz
Golden 1 Credit Union
BALL 0 STRIKE 0 OUT 0
1 2 3 4 5 6 7 8 9 R H E
Rainiers 0 0 1 0 1 2 0
River Cats 1 0 0 1 1 0

Boating Safety and Environmental Awareness Multimedia Campaign

Love CA. Boat CA. Save CA.


I CA
If you love California as much as we do promise to wear your lifejacket.
Tell us your favorite waterway and in return we'll give you a few water
saving tips and create a custom avatar and timeline for your Facebook page.
Share it
WEAR IT CALIFORNIA
Wear it
FAQ about life
Find it
Locate your nearest
marina, pump out station,
Protect it
Take the quiz
for your chance to receive
I CA
Share it

TOP POSTS

Boat California
Published by Victoria Glass [?] · August 3 at 12:00pm ·

Show us your life jacket for #WearItWednesday and you could be featured on our Facebook and Instagram profiles!

90,287 people reached

Like Comment Share

Cruz Ortiz, RayRay Ponce and 5.3K others

139 shares

5,300 likes
139 shares

Boat California
Published by Victoria Glass [?] · September 2 ·

As the sun sets on another great boating season, remember to boat safe and boat smart this #LaborDay!

181,633 people reached

Like Comment Share

Angel Christian, David F Hall and 8.8K others

674 shares

8,800 likes
674 shares

LIFE JACKET CAMPAIGN

***160M+ impressions** throughout all six BATA's...*

$1.6M in media buys

Over $647K in ADDED VALUE

- Internet: Video|Banners|Streaming Radio|Search
- Radio: General Market|Angler|Spanish Language
- Billboards: 7 static boards, 6 large digital boards
- Cable TV Sports: ESPN, FX, Speed, Spike, etc.
- Gas Station Pump Toppers: 260 locations
- Marina Posters: **460 posters & 11,500 bumper stickers at 130 marinas**

BATA's:

Sacramento
Stockton/Modesto
San Francisco
San Diego
Los Angeles
Riverside

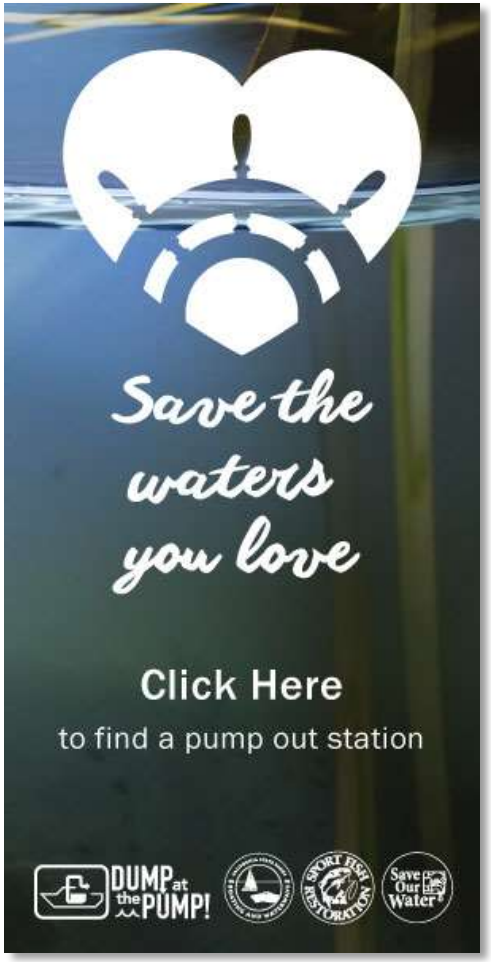
Bumper Stickers

CLEAN VESSEL

Digital and print placements throughout California

Western Outdoor News, CA Fly Fisherman,
The Fish Sniffer, and others

72% added value (30% required)




I CA
BoatCalifornia.com
Take the quiz.
Get the kit.
How much do you love boating? Test your knowledge for a chance to receive an I CA Boater Kit,
and a chance to receive an inflatable life jacket.
click here
Clean Boating QUIZ
BOATING
CLEAN & GREEN


RESEARCH

METHODOLOGY

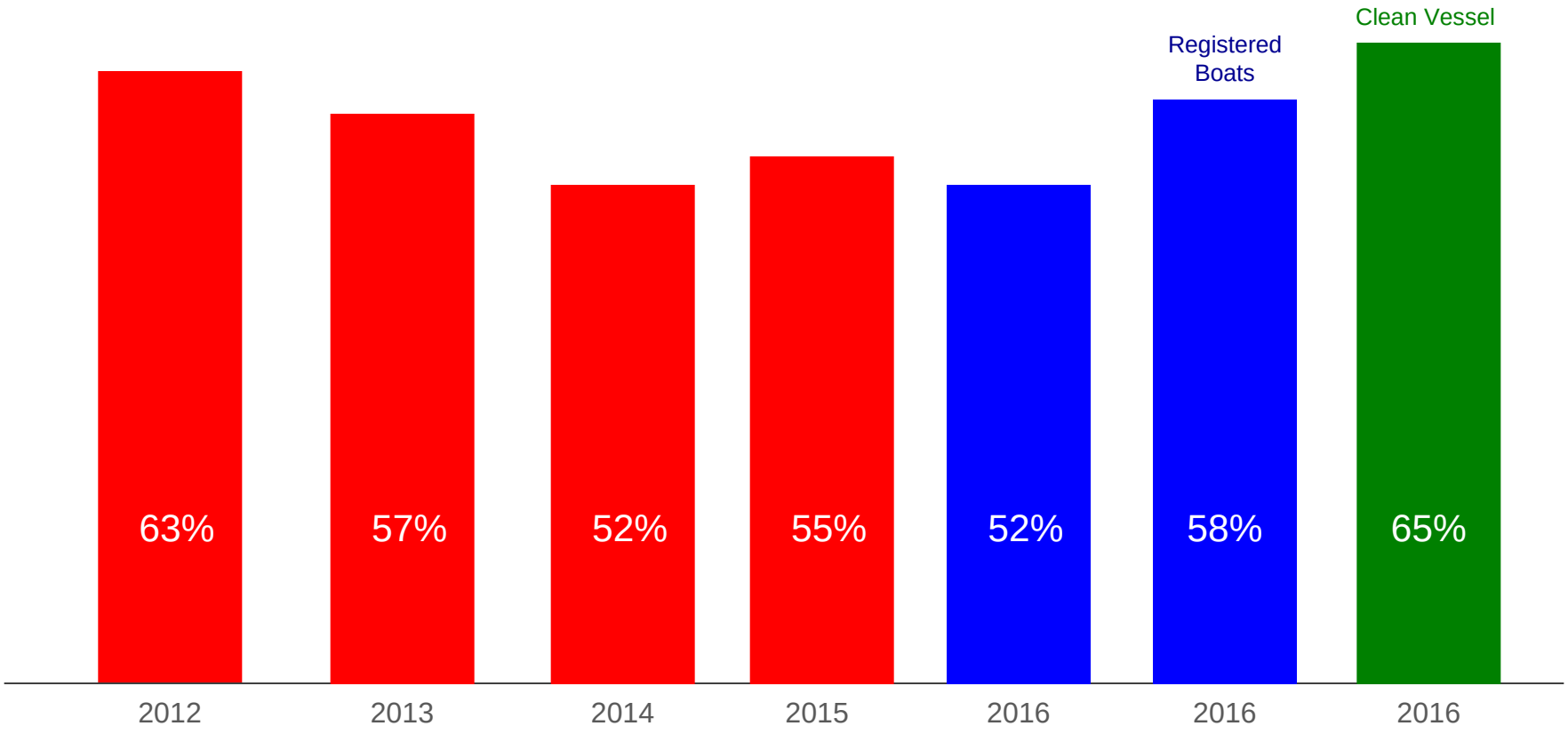
- Surveyed 756 waterway users online, both power and paddle, with 500 being registered boaters
- Top six boating accident target areas:
  Los Angeles, Stockton/Modesto, Riverside, Sacramento, San Diego and San Francisco
- Projectable study within + or – 4.0 percentage points at a 95% confidence level

MOST IMPORTANT

Recall, Influence, Behavior

AD RECALL - unaided

In the last 6 months, do you recall seeing or hearing any advertising on boating safety or life jackets?



AD INFLUENCE

Do these ads influence you to ...?

Cone Zone
56%-62%

Wear a life jacket? 85%

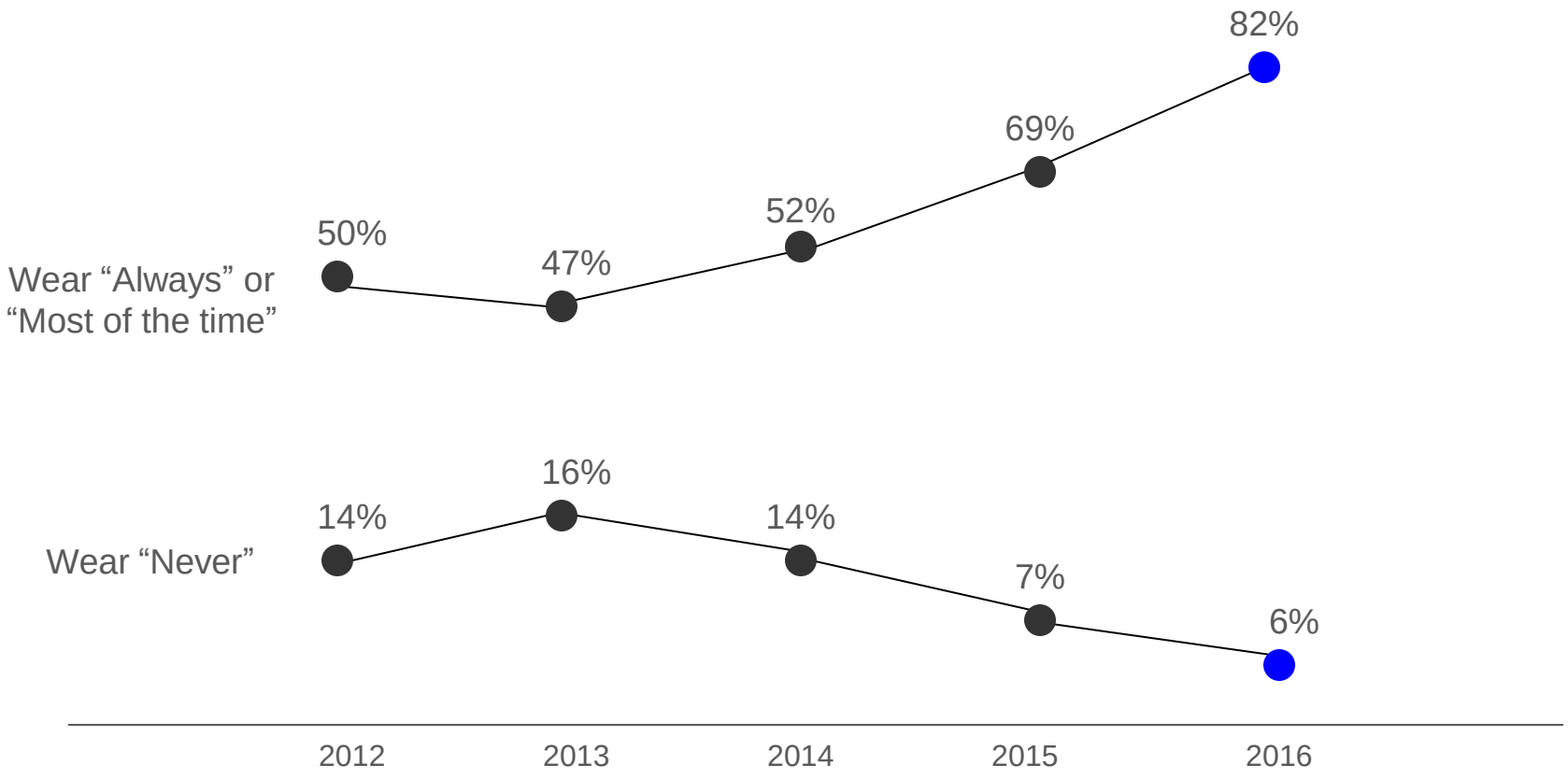
Good reminder to wear/You can never be too safe
The importance of it to family, kids and yourself
The message just made sense

Not dump sewage in the water? 87%

Save the environment/Keep fish animals safe
We need clean water for our lives/drought
Good reminder to not dump sewage

SELF REPORTED BEHAVIOR

How often do you wear a life jacket when boating?



CALIFORNIA BOATER CARD

Strong baseline awareness

What do you know about the “California Boater Card”?

Boaters are now required to have one **40%**

Boaters will be required to have one in few years **27%**

67% of registered boat owners are aware

You have to pass an exam **29%** to receive your card

You have to fill out a form **21%** to receive your card

I don’t know about the “California Boater Card” **33%**

2017 Media SUMMARY

LIFE JACKET CAMPAIGN
- Continue the Save the Ones You Love life jacket campaign to increase awareness and recall in 2017.

-Maximize digital media use in 2017, including mobile, and explore new opportunities such as a boating app.

CLEAN VESSEL
-Increase targeted print and digital placements.

CLEAN & GREEN QUIZ
-Optimize and expand this campaign in 2017.

BOATER CARD
-Press play on Boater Card campaign in early 2017 to fast forward awareness before summer boating season begins.

DBW Oceanography Program
$$ince 1974

Boating Facilities Design, Access, Safety & Education
Beach Restoration & Erosion Control

Health, Inspiration & Education, Biological Diversity & Natural,
Cultural Resources, High-Quality Outdoor Recreation

Faculty, Researchers
Undergraduates & Graduate Students, Post-Doctoral Fellows

Data & Peer-Reviewed Journal Articles

Scripps Inst Oceanography
U Southern California
San Francisco State
U British Columbia
UC Santa Barbara
San Diego State
UC Santa Cruz
UC San Diego
UC Berkeley
U San Diego
Ohio State U
UA Baja CA
U Nevada
UC Irvine
UCLA

Fog
Wind
Tides
Waves
El Niño
Sea level
Tsunamis
Cliff erosion
Beach erosion
Parks facilities
Urban flooding
Harbor flushing
Water resources
Delta boat traffic
Wind-blown sand
Anti-fouling paint
Harbors & halibut
Sand nourishment
Delta levee erosion
Longshore currents
Antarctic ice shelves
Surf zone turbulence
Long-term temp/salinity
Petroleum hydrocarbons

Publications 2015

Neira, *et al*., 2015. Macrofaunal recolonization of copper-contaminated sediments in San Diego Bay, *Mar. Poll. Res.*, 101.

Holmes-Dean, *et al*., 2015. Spectral Characteristics of the 1960 Tsunami at Crescent City, CA, Sci. Tsunami Hazards, *J. Tsunami Soc. Int*.

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Young, 2015. Recent deep-seated coastal landsliding at San Onofre State Beach, California, *Geomorph.*

Kim and Cornuelle, 2015. Coastal ocean climatology of temperature and salinity off the Southern California Bight: Seasonal variability, climate index correlation, and linear trend, *Prog. Oceanog*.

Gallien, *et al*., 2015. Geometric properties of anthropogenic flood control berms on southern California beaches, *Ocean & Coastal Mgmt.*

Ludka, *et al*., 2015. Field evidence of beach profile evolution toward equilibrium, *J. Geophys. Res.*

Fiedler, *et al*., 2015. Observations of runup and energy flux on a low-slope beach with high-energy, long-period ocean swell, *Geophys. Res. Lett*.

Kochnower, *et al*., 2015. Factors Influencing Local Decisions to use Habitats to Protect Coastal Communities from Hazards, *Ocean & Coastal Mgmt.*

Publications 2016

Flick, 2016. California tides, sea level, and waves – Winter 2015-16, *Shore & Beach*.

Neira, *et al*., 2016. Occurrence and distribution of polycyclic aromatic hydrocarbons in surface sediments of San Diego Bay marinas, *Mar. Poll. Bull.*

Doria, *et al*., 2016. Observations and modeling of San Diego beaches during El Niño, *Cont. Shelf Res*.

O'Reilly, *et al*., 2016. The California coastal wave monitoring and prediction system, *Coastal Eng*.

Bromirski, *et al*., 2016. Storm Surge Along the Pacific Coast of North America, *J. Geophys. Res.*

Diez, *et al*, 2016. Ice shelf structure derived from dispersion curve analysis of ambient seismic noise, Ross Ice Shelf, Antarctica, *Geophys. J. Internat*.

Costa-Cabral, *et al*. , 2016. Projecting and Forecasting Winter Precipitation Extremes and Meteorological Drought in California Using the North Pacific High Sea Level Pressure Anomaly, *J. Climate*.

Gallien, T.W., 2016. Validated coastal flood modeling at Imperial Beach, California: Comparing total water level, empirical and numerical overtopping methodologies, *Coastal Eng.*

2013-15 Warming & El Niño 2015-16

- Blob warming bigger impact than El Niño
  - Productivity decrease
  - Ecosystem disruption
  - Drought

- El Niño – Minimal Coastal Impact
  - Peak high tides lower & earlier
  - High sea levels earlier
  - Storm waves fewer, weaker, later

Hydrocarbon Toxics in Marinas

Contents lists available at ScienceDirect

Marine Pollution Bulletin

journal homepage: www.elsevier.com/locate/marpolbul

Occurrence and distribution of polycyclic aromatic hydrocarbons in surface sediments of San Diego Bay marinas

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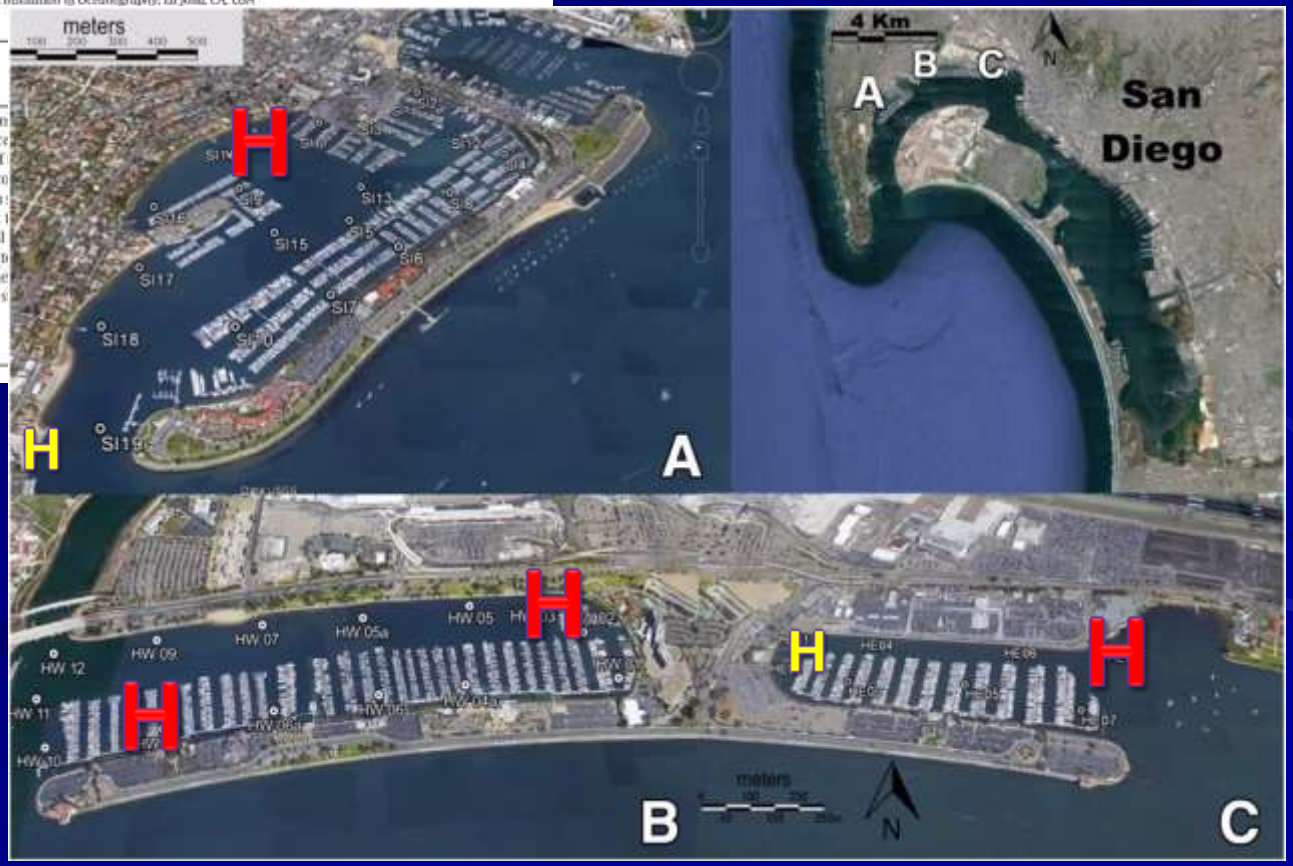
Marina
San Diego Bay

ABSTRACT

Polycyclic aromatic hydrocarbon
genic properties, and persistence
sources of PAHs in sediments of
ferences among marinas, with co
tion suggest an association with
rings) were dominant (>86%);
(61.4–70%) but ecotoxicological
contributor (>90%) to the total
ments appear to be derived large
basins by aerial deposition and

- Toxic
- Persistent
- Bio-accumulates



- Cars
- Storm drains

Oceanography Program 2016-17

- CDIP CA Buoys - Wave & beach research, NWS forecasts, boating safety, www.cdip.ucsd.edu
- CDIP Waves & Beaches – Boating facility & state beach wave & shore change modeling & prediction
- Facilities Flood Modeling (UCLA) – OC Marina & state beach flood & MSL rise risks
- State Beaches & Estuaries - Torrey Pines & San Elijo state beach UAV inlet closure & big events
- State Beach & Cliff Erosion – Current hazards & worsening from MSL rise
- Shore Stations - 100-yr long temperature & salinity measurement, analysis & dissemination
- Sea Level & Storm Surge - Trends & coincidence with waves that cause boating facility damage
- Toxics in Marinas – Cu, PAHs & PCB contaminant impacts on soft-bottom organisms

Ross Ice Shelf Seismometer Removal

Response of the Ross Ice Shelf, Antarctica, to ocean gravity-wave forcing

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[2]*Woods Hole Oceanographic Institution, Woods Hole, MA, USA*

ABSTRACT. Comparison of the Ross Ice Shelf (RIS, Antarctica) response at near-front seismic station RIS2 with seismometer data collected on tabular iceberg B15A and with land-based seismic stations at Scott Base on tification of RIS-specific s driven wind waves and sw e RIS varies with season a se of the RIS to IG wave ar ctral peak at near-ice-front damped by st events excite coherence be combined with the appearance of a spectral peak near 10 Hz in April whe that lower (higher) temperatures during austral winter (summer) mon characteristics and hence mechanical properties of the RIS.

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Central question in climate change today: "What will the ice do?"