

# **Appendix D**

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## **Comment Letters**

*Public Comment Period: June 20 – August 4, 2011*

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

August 3, 2011

Jan O'Hara  
San Francisco Bay Regional Water Quality Control Board  
151 Clay Street, Suite 1400  
Oakland, California 94612

Dear Ms. O'Hara:

Thank you for the opportunity to comment on the Proposed Basin Plan Amendment for the Refinement of Beneficial Uses for Hayward Marsh. We are pleased to express our support for the proposed amendment. The changes include amending Table 2-4, *Beneficial Uses of Wetland Areas*, to identify Hayward Marsh as a distinct water body with specific beneficial uses, to identify other Hayward marshlands and their uses, and to move the column entitled "Salt" to its correct place as a wetland type. These and the other changes help clarify the Basin Plan and assist in the protection of water quality within the San Francisco Bay Regional Water Quality Control Board (Regional Board).

The proposed amendment does not apply the REC-1 beneficial use to Hayward Marsh. The REC-1 beneficial use is for contact water recreation and is a presumed designated use for all waters of the U.S. under the Clean Water Act at section 101(a)(2). EPA regulations at 40 CFR Part 131.10 state that a State may remove a designated use that is not an existing use, if the State can show that specific conditions exist; this is commonly referred to as a Use Attainability Analysis (UAA). The Staff Report indicates that the Hayward Marsh area had been used for salt evaporation ponds starting in the 19<sup>th</sup> century until the 1940s; it remained unused until the 1980s when it was returned to marshland with treated secondary effluent from the Alvarado Wastewater Treatment Plant to provide habitat for wildlife. This history indicates that the REC-1 use may not be an existing use. The Staff Report includes a UAA for Hayward Marsh, and states that one basis is that naturally occurring pollutant concentrations prevent the attainment of the REC-1 use (see 40 CFR 131.10(g)(1)). Support for this basis is that the marsh system is now used for wildlife habitat and the large bird population prevents attainment of the pathogen water quality standard required for a REC-1 use. This discussion appears reasonable.

Pursuant to the Basin Plan, the proposed change to de-designate the REC-1 use from Hayward Marsh<sup>1</sup> will only affect the applicable water quality objectives for pathogens. The Basin Plan at Table 3-1 shows that the objectives for the contact water recreation (REC-1) use for pathogens include: a fecal coliform geometric mean of < 200 MPN/100 ml and a 90<sup>th</sup> percentile of < 400 MPN/100 ml, and a total coliform median of < 240 MPN/100 ml and a no sample > 10,000 MPN/100 ml<sup>2</sup>. These bacteriological objectives are based on indicator organisms for pathogens.

The Staff Report states at page 9, that the permit for the treatment plant (NPDES No. CA0038636) includes a fecal coliform limit at the point the effluent enters the marsh system<sup>3</sup>. The effluent limits in this permit (Order No. R2-2006-0031) state that the effluent shall not exceed a five-day log mean fecal coliform density of 500 MPN/100 ml and a five-day 90<sup>th</sup> percentile value of 1,100 MPN/100 ml. The Staff Report indicates the treatment plant is meeting this limit.

The wastewater treatment system is currently permitted and is achieving specific bacteriological limits at the point where treated effluent enters the marsh system (Basin 1), which is considered part of the treatment system. Since the wastewater discharge is meeting bacteriological limits at the point of entry into the marsh system, we expect the facility to continue to meet these current bacteriological limits to assure that water quality standards, including antidegradation requirements, are met. This will help limit the number of possible pathogens associated with human waste from entering Hayward Marsh. Ensuring that the discharge meets its bacteriological limits at the point of entry into the marsh system will help limit the possibility of a water quality problem associated with human pathogens.

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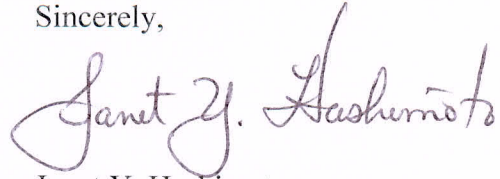
<sup>1</sup> The de-designation of the REC-1 use for Hayward Marsh will only apply to the part of the marsh that is a water of the US, or to Basins 3A and 3B of the marsh system as shown on Figure 3, Schematic Diagram of Hayward Marsh, of the Staff Report at page 6. Basins 1, 2A and 2B of the marsh system are considered part of the wastewater treatment system.

<sup>2</sup> These are the existing Basin Plan objectives for waters designated for the REC-1 use. On July 14, 2011, the State requested EPA approval of revised bacteriological objectives for waters with REC-1 uses within the Region; the revised objectives include additional enterococcus objectives for marine and estuarine waters. EPA is currently reviewing the package.

<sup>3</sup> Treated effluent from the wastewater treatment system flows into Basin 1 of the marsh system at Point E-1, and from Basin 1, effluent flows into Basins 2A and 2B of the marsh system, as shown on Figure 3 of the Staff Report at page 6. Effluent from Basins 2A and 2B flow into Basins 3A and 3B of the marsh system.

We are pleased to support this proposed Basin Plan Amendment, and urge its adoption. If you have any questions, please e-mail or call Diane Fleck of my staff at [Fleck.Diane@EPA.gov](mailto:Fleck.Diane@EPA.gov) or 415 972-3480.

Sincerely,

A handwritten signature in cursive script that reads "Janet Y. Hashimoto". The signature is written in dark ink and is positioned above the printed name.

Janet Y. Hashimoto

Manager, Standards and TMDL Office





**Directors**  
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August 4, 2011

**VIA EMAIL:** To: [info2@waterboards.ca.gov](mailto:info2@waterboards.ca.gov); [johara@waterboards.ca.gov](mailto:johara@waterboards.ca.gov)  
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Ms. Jan O'Hara  
San Francisco Bay Regional Water Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

**Subject: Comments Regarding San Francisco Bay Basin Water Quality Control Plan - Refinement of Beneficial Uses of Hayward Marsh, Draft Staff Report (June 20, 2011)**

Dear Ms. O'Hara:

On behalf of the East Bay Regional Park District, Union Sanitary District, and the East Bay Dischargers Authority, thank you for the opportunity to comment on the *San Francisco Bay Basin Water Quality Control Plan - Refinement of Beneficial Uses of Hayward Marsh, Draft Staff Report (June 20, 2011) (Amendment)*. Our comments can be found in the attached document.

We would like to thank you and your staff for your diligence and care in preparing this document. Should you have questions or require additional information, please contact me at (510) 477-7560.

Sincerely,

David Livingston  
Manager, Treatment and Disposal Services

**August 4 2011**  
**Comments Regarding Draft Staff Report dtd June 20, 2011**  
**Page 2**

**Enclosure**

**cc: Bruce Wolfe, Regional Water Board**  
**Naomi Feger, Regional Water Board**  
**Monica Oakley, RMC / Oakley Water Strategies**



**Union Sanitary District  
Comments Regarding  
San Francisco Bay Basin Water Quality Control Plan  
Refinement of Beneficial Uses of Hayward Marsh, Draft Staff Report**

**August 4, 2011**

Union Sanitary District (District) appreciates the opportunity to submit the following comments on the *San Francisco Bay Basin Water Quality Control Plan - Refinement of Beneficial Uses of Hayward Marsh, Draft Staff Report* (June 20, 2011) (Draft Staff Report).

- 1. The District requests for accuracy that the East Bay Regional Park District (EBRPD) and the East Bay Dischargers Authority (EBDA) are added to the discussion about issuance of the first permit for Hayward Marsh.**

The District requests that the names of the two other co-permittees be added to the discussion about the issuance of the first permit for Hayward Marsh, as indicated below:

(Page 1)

Currently, the Basin Plan designates beneficial uses for all wetlands in the Hayward area. Hayward Marsh is distinct among these wetlands because it was constructed in 1988 for the purpose of reclaiming treated wastewater to create brackish water habitat for wildlife. That same year, the Water Board issued a permit under the National Pollutant Discharge Elimination System (NPDES) to Union Sanitary District (USD), [East Bay Regional Park District \(EBRPD\)](#), and [East Bay Dischargers Authority \(EBDA\)](#) to supply treated effluent to Hayward Marsh.

- 2. The District requests that language throughout the permit regarding the basis for the current bacteria objectives be revised for accuracy.**

The bacteria effluent limits included in the current permit were established in 1994 as explained in the *Justification for Fecal Coliform Effluent Limitation* (EBDA 1995). This report indicates that the limits were allowed in place of total coliform limits based on the “limited degree to which the receiving waters in the vicinity of the EBDA outfall are used for water contact recreation...” Noncontact water recreation (REC-2) is discussed separately throughout that report.

The District requests that the following edits are made for accuracy:

(Page 1)

Water quality based effluent limits for bacteria in that permit, and subsequently reissued permits, were not based on [the Basin Plan’s current](#) water quality objectives for the [water non](#)contact recreation (REC-~~2~~1) beneficial use.

(Page 8)

For treated effluent entering the Marsh, the permit contains ~~the following effluent limitations for bacterial indicators that are derived to be protective of REC-2. The water quality-based effluent limits in the current permit are:~~

(Page 16)

In the proposed project, the REC-1 beneficial use would not apply to Hayward Marsh, and NPDES permit requirements would continue to be ~~based on bacteriologic water quality objectives for protective of~~ REC-2 beneficial uses.

**3. The District requests that descriptions of the discharge point into Lower San Francisco Bay and the Northwest Channel be revised for consistency with the permit.**

The District requests that descriptions of the discharge point into Lower San Francisco Bay and the Northwest Channel be revised as follows:

(Page 6)

From freshwater Basins 2A and 2B, treated effluent enters the Mixing Channel, where it mixes with saline inflow from San Francisco Bay and becomes brackish. The brackish mixture enters Basins 3A and 3B, providing habitat to numerous species, as further described in Section 5.1 below. Finally, flow from Basins 3A and 3B enters the Northwest Channel and ~~then~~ discharges into Lower San Francisco Bay through an earthen channel (~~point E-2 in Figure 3~~).

(Page 7)

This is particularly important along the Northwest ~~Discharge~~ Channel, where fence posts would give birds of prey easy access to the nests, eggs, and nestling on the islands in Basin 3B.

**4. The District requests several revisions to the discussion of special-status species.**

The District requests that the descriptions of certain species protected by the Preservation of Rare and Endangered (RARE) beneficial use be revised for accuracy, as follows:

(Page 7)

The large bird populations, and particularly the nesting sites, attract predators, including birds of prey and raccoons. EBRPD personnel trap and remove raccoons from the vegetation bands and the freshwater islands, which the raccoons access from the surrounding levies. The brackish water islands in Basin 3A and 3B are isolated from mainland mammal predators, but are subject to birds of prey, such as hawks, ravens, crows, and gulls. Because ~~endangered special-status~~ species, including ~~western~~ snowy plover (~~federally-listed as threatened~~), and ~~California~~ least tern, (~~federally- and state-listed as endangered~~), nest on the brackish water islands, predatory birds are controlled as necessary by the U.S. Department of Agriculture's Wildlife Service under permit from the U.S. Fish & Wildlife Service.

(Page 10)

With the exception of RARE, each of these is designated as a beneficial use of wetland in the Hayward area in Basin Plan Table 2-4. ~~Rare and endangered s~~ Species protected under this beneficial use that can be found on Hayward Marsh include ~~Forster's tern, Caspian tern, black skimmers, Western-western~~ snowy plover, and California least tern.

**5. The District requests that Table 1 language be revised to more clearly show that REC-1 enterococcus water quality objectives are not attained in Basins 3A and 3B.**

The District requests that language in Table 1 be clarified as follows to avoid any confusion about the meaning of the information included:

(Page 9)

**Table 1. Summer 2008 Bacteriological Data**

Enterococci (MPN/100ml)								
Station	Event 1	Event 2	Event 3	Event 4	Event 5	Geometric Mean	90 <sup>th</sup> Percentile	<u>REC-1</u> Water Quality Objective Attained*
	7/25/08	8/1/08	8/8/08	8/15/08	8/22/08			
E-1	2	12	16	10	10	8.2	14.4	<del>Meets REC-1</del> <u>Yes</u>
3A	292	3600	820	10	10	153.9	2488	<del>Exceeds REC-1</del> <u>No</u>
3B	127	41	1700	3400	130	446.4	5980	<del>Exceeds REC-1</del> <u>No</u>
E-3	10	10	10	10	20	11.5	16	<del>Meets REC-1</del> <u>Yes</u>

\*See discussion of Enterococci objectives below.

**6. The District requests that the explanation of why the Marsh does not support REC-1 be revised for clarity.**

The District requests that the explanation be revised as follows, to indicate that the Marsh was created to be, and is successfully sustained as, an important wildlife habitat.

(Page 11)

- 40 CFR 131.10(g)(3): Human-caused conditions or sources of pollution prevent the attainment of the REC-1, and these conditions cannot be remedied or would cause more environmental damage to correct than to leave in place. This criterion applies because Hayward Marsh was created and is sustained using reclaimed wastewater to create wildlife habitat. The Marsh was never intended to be used for REC-1 activities.

**7. The District would like to provide missing bird survey data for inclusion in Table 2.**

Bird survey data is now available for December 2010. The District requests that *Table 2. Summary of Monthly Bird Survey Data* be filled in as followed:

(Page 12)

**Table 2. Summary of Monthly Bird Survey Data**

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
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Month	Number of Birds Counted									
Jan	4650	3101	3963	4687	3190	4946	3315	4423	9366	5059
Feb	3095	2292	2594	3563	4238	4390	5662	3389	2818	4121
Mar	4937	4007	4273	4312	4057	4702	9983	5159	3837	4023
April	3236	3581	2734	3090	3360	5038	7134	2839	3338	3248
May	2350	3261	1771	1696	1930	2070	3511	2604	2521	2876
June	2959	3220	2768	2775	2251	2122	3324	2012	1800	2968
July	3313	2332	2727	2520	2405	2237	2510	2834	2224	3375
Aug	2672	3861	3843	2737	4282	3076	3437	2158	1996	3224
Sept	6812	7039	12,451	15,292	7798	6008	6631	5272	7760	4619
Oct	8423	7380	14,607	7779	10,178	6505	7874	7180	5053	6701
Nov	8345	3868	5977	6110	6008	6231	6135	8269	5765	12,010
Dec	4374	4551	5171	6087	5852	4068	4413	5707	4093	<del>no data</del> 3562

**8. The District requests that the description of environmental benefits of Hayward Marsh be revised for accuracy.**

The District would like to provide some suggested revisions to *Section 6.4: Environmental Benefits of Hayward Marsh*, to ensure that the description is accurate and up-to-date. These revisions are shown below.

(Page 14)

Notable environmental benefits associated with the marsh include:

- The unique complex of islands within Hayward Marsh protects ground-nesting birds from predation by mainland-based predators, with ~~an average of 500~~ 568 nesting pairs of birds in the marsh during the 2011 nesting season.
- The un-vegetated islands in Hayward Marsh provide optimal conditions for nesting Forster's tern. Hundreds of terns have nested on several islands within the marsh, resulting in some of the greatest reproductive success of terns nesting throughout the San Francisco Bay Estuary.
- The black skimmer nests on islands within the Marsh, which represent the northernmost known nesting locations for this species along the Pacific Coast.
- The California least tern, a federal and state endangered species, has nested successfully in the Marsh ~~in~~ since 1990. During the 2010 nesting season, there were 53 nests, which produced 91 chicks and approximately 75 fledglings. spring of 2005, eight pairs of California least terns attempted to nest on enhanced nesting areas in the Marsh, and several more pairs were observed prospecting for nest sites. Establishing a viable California least tern colony is of regional significance because few nesting colonies exist within San Francisco Bay.
- The Hayward Marsh at one time supporteds one of the largest colonies of nesting snowy egrets and black-crowned night herons in Lower San Francisco Bay. The federally threatened Western snowy plover and the Caspian tern also nest in the Marsh.

**9. The District requests that descriptions of the goals of the Hayward Marsh be revised for accuracy.**

There were several goals behind the creation of the Marsh, including the beneficial reuse of treated wastewater, but it may not be correct to suggest that this was the primary goal. The District requests that descriptions of the intended goals of the Hayward Marsh be revised for accuracy as indicated below.

(Page 15)

**Water Reuse**

The beneficial reuse of treated wastewater ~~was a primary goal in the creation of Hayward Marsh, and it is also~~ a goal of the Water Boards. By reusing approximately 3 mgd of recycled water for over two decades, Hayward Marsh has provided a sustainable freshwater supply to support fish and wildlife habitat and a significant environmental benefit.

(Page 16)

Hayward Marsh was created in 1988 ~~and was designed to use reclaimed for the purpose of reclaiming~~ treated wastewater to create brackish marsh habitat. Since that time, the Marsh has been operated as brackish aquatic habitat to support numerous wildlife species and protect their nesting sites. Water contact recreation has never been allowed in the marsh, because human contact would be inconsistent with the purposes of Hayward Marsh.

**10. The District requests that the discussion of environmental impacts be revised for clarity.**

The District requests that the reference to a potential need to construct facilities to support alternative disinfection processes be removed to avoid any misconceptions, as the District has no intention or reason to consider alternatives such as ultraviolet disinfection at this time. A second sentence regarding impacts of additional chlorination is suggested instead, as shown below.

(Page 18)

In addition, there are likely to be additional environmental impacts associated with any increased use of chlorine at the wastewater treatment plant ~~or construction of facilities to support alternative disinfection treatments, e.g., ultraviolet treatment~~, that would be required to be implemented in order to achieve REC-1 objectives. These impacts could potentially include a substantial increase in the discharge of disinfection byproducts to the Bay.

**11. The District requests that *Table 2-4 Beneficial Uses of Wetlands Areas* be revised to remove the fresh Wetland Type designation for the Marsh and to correct the name of the Marsh.**

Table 2-4 of the Proposed Basin Plan Amendment in Appendix A includes both the fresh and brackish Wetland Type designations for the Marsh. Freshwater Basins 1, 2A, and 2B are part of the District’s treatment process and are should not be included in this designation. Basins 3A and 3B, to which the beneficial uses described in this Draft Staff Report apply, are brackish marsh. In addition, the name of the Mash should be corrected to avoid confusion.

(Appendix A – Page 1)

Basin / Marsh Area	Wetland Types			Beneficial Uses									
	Fresh	Brackish	Salt	EST	MAR	MIGR	COMM	RARE	REC1	REC2	SALT	SPWN	WILD
ALAMEDA COUNTY													
Hayward Shoreline Marsh	●	●	●	●				●		●		●	●