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## Central Valley Regional Water Quality Control Board

31 August 2018

Mr. Joseph C. McGahan  
Drainage Coordinator  
Grassland Bypass Project  
Post Office Box 2157  
Los Banos, CA 93635

**REVIEW OF THE 2017 ANNUAL MONITORING REPORT FOR THE GRASSLAND BYPASS PROJECT ORDER R5-2015-0094 AND THE 2016 MANAGEMENT PRACTICE INFORMATION FOR THE GRASSLAND DRAINAGE AREA ORDER R5-2015-0095**

Thank you for submitting the 2017 Annual Monitoring Report (AMR) for the Grassland Bypass Project on 26 April 2018 (resubmitted on 23 August 2018) as required by Order R5-2015-0094 Waste Discharge Requirements for San Luis & Delta-Mendota Water Authority and United States Department of the Interior Bureau of Reclamation (Order). The AMR covers the reporting period from 1 January through 31 December 2017.

A Summary of Management Practice Information Collected from Farm Evaluations and Managed Wetland Evaluations for 2016 Growing Season, submitted per the requirements of Order R5-2015-0095 Waste Discharge Requirements for Growers in the Grassland Drainage Area, was included as an attachment to the AMR.

The Central Valley Water Board staff review of the AMR and management practice information is in the attached memorandum and associated checklist. Staff identified minor instances where the requirements of the Order were not met. Care should be taken to ensure that the Order's requirements are fully met in subsequent annual report submittals.

If you have any questions or comments regarding the review, please contact Ashley Peters at 916-464-4857 or [Ashley.Peters@waterboards.ca.gov](mailto:Ashley.Peters@waterboards.ca.gov).

***Original signed by***

Sue McConnell  
Program Manager  
Irrigated Lands Regulatory Program

***Original signed by***

Susan Fregien  
Senior Environmental Scientist  
Irrigated Lands Regulatory Program

cc: Michael Jackson, US Bureau of Reclamation Fresno  
Jason Peltier, San Luis & Delta-Mendota Water Authority

Enclosure: Staff review of the AMR

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## Central Valley Regional Water Quality Control Board

**TO:** Susan Fregien  
Senior Environmental Scientist  
**IRRIGATED LANDS REGULATORY PROGRAM**

**FROM:** Ashley Peters, PE  
Water Resource Control Engineer  
**IRRIGATED LANDS REGULATORY PROGRAM**

**DATE:** 24 August 2018

**SUBJECT:** REVIEW OF THE GRASSLAND BYPASS PROJECT 2017 ANNUAL  
MONITORING REPORT AND 2016 MANAGEMENT PRACTICES

On 26 April 2018, the Central Valley Water Board received the Grassland Bypass Project 2017 Annual Monitoring Report (AMR) from the San Luis & Delta-Mendota Water Authority and the United States Bureau of Reclamation (Dischargers) as required by the Monitoring and Reporting Program (MRP) for General Order R5-2015-0094 (Order). On 23 August 2018, a revised AMR was submitted in response to initial staff comments requesting minor changes for consistency throughout the report. The AMR covers the reporting period from 1 January 2017 through 31 December 2017.

A Summary of Management Practice Information Collected from Farm Evaluations and Managed Wetland Evaluations for 2016 Growing Season, submitted per the requirements of Order R5-2015-0095 Waste Discharge Requirements for Growers in the Grassland Drainage Area, was included as an attachment to the AMR.

In this memorandum, staff provides a summary of the monitoring activities conducted by the Dischargers during the 2017 reporting period. A checklist (attached) was used to aid staff in review of the AMR and management practice information. Staff derived the checklist from the Order and it provides an itemized account of the compliance components.

Staff identified only minor issues in the revised AMR that do not represent a substantial deviation from the Order's requirements, as noted in the AMR Checklist, and recommends that the AMR be approved.

### 2017 Program Summary

The Dischargers performed surface water sampling from January through December 2017 at four sites: B3 – Gun Club Road in San Luis Drain, D – Downstream of San Luis Drain in Mud Slough (north), R – China Island Unit in San Joaquin River, and N – Crows Landing in San Joaquin River. The sampling schedule and constituents monitored were determined based on requirements listed in MRP Table 2. Monitoring for each constituent was completed at the

frequency specified in the MRP, except as noted in the AMR and primarily due to extreme weather resulting in site inaccessibility.

2017 was a wet year type for the San Joaquin River. Approximately 10,900 acre feet of subsurface drain water was discharged through the San Luis Drain to Mud Slough (North) during 2017. This is an increase from 8,361 acre feet in 2016. Storm water monitoring was not triggered for 2017.

Salt (approximated by electrical conductivity [EC]), boron, molybdenum, and selenium are constituents that naturally occur in the soil within the Grassland Drainage Area. These minerals are dissolved into the subsurface drainage as water infiltrates into the soil, prior to being collected and discharged to the San Luis Drain.

During the reporting period, exceedances were observed for EC and boron. The exceedances for boron occurred at Site D and are summarized in Table 1. Exceedances for EC occurred at Sites D, N, and R. Of these sites, EC exceedances were measured at Site D with the greatest frequency, occurring during most of the weekly monitoring events, including from 21 April through 31 December when there was no discharge into the San Luis Drain.

**Table 1: Summary of Boron Exceedances at Site D**

Sample Date	Site D	
	Boron ( $\mu\text{g/L}$ )	Exceedance Limit
April	2,733	2,000 monthly mean
May	2,425	2,000 monthly mean
July	2,625	2,000 monthly mean

Notes:

$\mu\text{g/L}$  = micrograms per liter

More than two exceedances occurred during the reporting period for EC at Sites D, N, and R, and for boron at Site D. A surface water quality management plan is not required for these constituents because they are addressed by a Drainage Management Plan, as described in Section V.G of the Order. EC and boron are addressed by the Westside Regional Drainage Plan (2003), which was developed to address drainage production and discharge from the Grassland Drainage Area. Updates on the drainage plan were provided in the 2017 AMR.