#### STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

MEETING DATE: September 13, 2017

ITEM: **5** 

SUBJECT: EXECUTIVE OFFICER'S REPORT

Executive Officer's Report September 6, 2017



# **EXECUTIVE OFFICER'S REPORT:** September 2017

A Monthly Report to the Board and Public

NEXT MEETING: September 13, 2017 WEBSITE: http://www.waterboards.ca.gov/sanfranciscobay/

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#### Watershed Stewards Program at the Water Board (Kevin Lunde)

In August, Michelle Pond and Yerae Seo completed their 10 ½ month service term with the AmeriCorps Watershed Stewards Program (WSP) housed at the Water Board. Michelle and Yerae worked primarily in the Planning Division's Surface Water Ambient Monitoring Program (SWAMP) unit with Environmental Scientists Kristina Yoshida and Rebecca Nordenholt, helping to monitor water quality throughout the Region. After they leave the Water Board, Yerae will be working locally in environmental consulting, and Michelle will be working with a different AmeriCorps program. The Water Board will be welcoming two new WSP staff in October.

The primary focus of WSP is to assist communities and organizations with habitat restoration for salmonids (Chinook salmon, Coho salmon, and steelhead trout) in order to rehabilitate these threatened and endangered species to healthy and historic populations. Each year, WSP places approximately 50 members at natural resource organization placement sites throughout California. This is the fifth year that our Water Board has been a placement site.

The support we receive annually from our two WSP members allows Water Board staff to accomplish tasks that would otherwise not be possible. In October and November 2016, Michelle and Yerae were core members of a methylmercury sampling team (Figure 1) in Suisun Marsh sloughs. Also last winter, Michelle and Yerae taught 70 young students about environmental stewardship at a low-income public school (Figure 2). Michelle also helped Staff Engineer Carrie Austin collect mercury samples in Walker Creek during a very large

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storm event (Figure 3). We used those data to evaluate the long-term success of mine cleanup and Walker Creek Mercury TMDL implementation actions. In spring and summer, Yerae and Michelle served a vital role on a four-person crew sampling 30 sites in Walker, Lagunitas, Olema, Pescadero, and Butano creeks to determine current biological, physical, and chemical conditions (Figure 4). Michelle and Yerae have also collected seasonal pathogen samples from the Petaluma River, San Gregorio and Pomponio creeks, and Bay beaches to support TMDL development. Thanks, Michelle and Yerae, for all your work!



**Figure 1.** Yerae Seo (left) and Michelle Pond (right) sampling for methylmercury in Suisun Marsh

**Figure 2.** Yerae Seo teaching environmental education lessons to 1<sup>st</sup> and 2<sup>nd</sup> grade students at Anna Yates Elementary School (Emeryville)



Figure 3. Sampling mercury concentrations during stormwater conditions in Walker Creek

**Figure 4.** *Michelle Pond (left) and Yerae Seo (right) collecting stream physical habitat data* 

### Update on Vapor Intrusion in Castro Valley (Barbara Sieminski)

My June Executive Officer's Report summarized the ongoing investigation and cleanup of groundwater pollution beneath several residences at Redwood Court in Castro Valley near a former leaking underground storage tank (UST) site. Based on that report, Board members

requested more information about several technical aspects: site hydrogeology, free product removal, and vapor intrusion mitigation systems. This update provides that technical information as well as news about the vapor intrusion issue at Redwood Court.

*Background*: Soil and groundwater beneath the Xtra Oil UST site at 3495 Castro Valley Road in Castro Valley are significantly impacted by petroleum hydrocarbon from former USTs, which were replaced in 1992. Up to four feet of petroleum free product was initially present on groundwater beneath the site. The UST discharger has completed significant onsite cleanup, removing free product and operating a groundwater extraction and treatment system to remove the contamination source and to control plume migration. However, petroleum had already migrated offsite via groundwater, mostly along preferential pathways, to the southwest and beneath a residential area at Redwood Court (Figure 5). Investigations at Redwood Court found petroleum free product on top of shallow groundwater as well as the solvents perchloroethene (PCE) and trichloroethene (TCE).

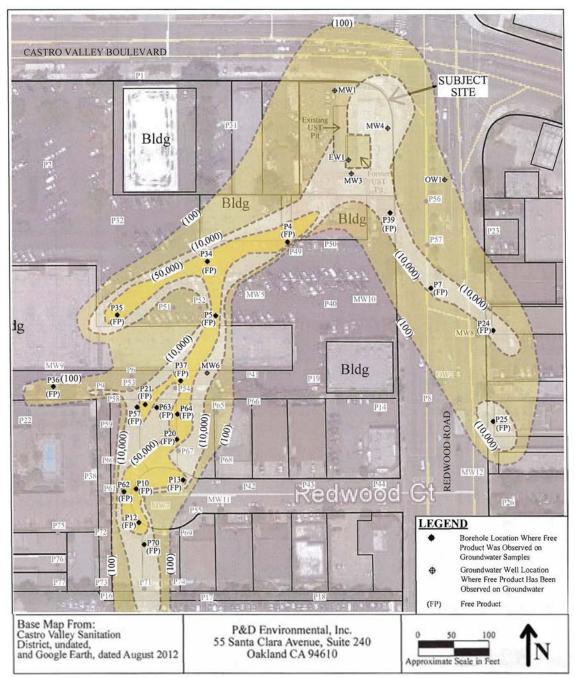
The discharger is taking steps to remove the petroleum, but the solvents appear to come from a different source. We have identified a likely source: Manor Cleaners, a dry cleaning business in the shopping center located upgradient of Redwood Court. Site history reports submitted by the current operator and the current landowner indicate that PCE was used at Manor Cleaners for about ten years prior to 2011. TCE is a byproduct of PCE degradation. We will be requiring technical reports from the current landowner and past operators at Manor Cleaners to confirm a PCE release and require its investigation and cleanup.

*Site hydrogeology*: The subsurface materials near the site consist of silty clay and silt with infrequent thin and discontinuous layers of clayey sand and silty sand. The first encountered groundwater is shallow, encountered between 4 to 10 feet below ground surface. The groundwater contamination plume is likely following buried stream channels of coarser alluvial materials, which provide preferential pathways. Sewer and storm drain lines may have facilitated the transport of this groundwater contamination.

Petroleum removal: The UST discharger has removed petroleum both onsite and offsite. Onsite removal has been ongoing since 2000, using three different methods: a passive hydrocarbon collection device until 2006, a peristaltic pump until 2013, and sorbent socks since 2013. In addition, groundwater extraction from an onsite well since 2007 has removed both free product and dissolved-phase petroleum. These methods have removed about 100 gallons of petroleum. Offsite removal began in 2015 and is still on-going. Currently, it consists of skimming free product weekly in existing remediation wells; this has removed about 37 gallons of petroleum to date. The discharger has proposed a system of horizontal wells to improve the effectiveness of offsite free-product removal. That proposal is being reviewed by our staff and the State Water Board, which reimburses eligible fuel UST cleanup costs.

Vapor intrusion mitigation systems: Petroleum constituents, PCE, and TCE have been detected in crawl spaces and indoor air at several Redwood Court residences, at concentrations posing a potential human health risk. To address this risk, the UST discharger

has installed vapor barriers beneath four buildings with crawl spaces and installed airfiltration units in the ground floor apartments of two buildings without crawl spaces. Sampling of indoor air at these buildings indicates that the vapor mitigation systems are working, but we will need ongoing monitoring to confirm their continued effectiveness. Our goal is that groundwater cleanup beneath Redwood Court will eliminate the need for these mitigation systems. We will update you on this case in the future as circumstances warrant.



**Figure 5.** Site vicinity aerial photo detail showing free product on groundwater samples and gasoline groundwater contours at Xtra Oil Company, 3495 Castro Valley Blvd. in Castro Valley.

#### **In-house Training**

No in-house trainings were scheduled during the month of August. Our next in-house training is scheduled for October.

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Brownbag seminars included an August 31 seminar on evaluation of tidal marsh benefits and focused on a case study for understanding how fish communities respond to wet and dry periods in the upper San Francisco Estuary.

#### **Staff Presentations**

Sewer Authority Mid-

Coastside

On August 29, Cheryl Prowell spoke at a luncheon meeting of the Northern California Professional Environmental Marketing Association (PEMA) in Oakland. She provided an update on SB445 implementation, specifically the SB445 Site Cleanup Subaccount Program (SCAP). SCAP provides grant funding to under-funded cleanup sites. She described recent grant activity and this Water Board's other SCAP activities (see Item 6F on the September Board meeting agenda for more on these other activities). PEMA is a professional association with an interest in site cleanup topics. Last year we spoke at a similar PEMA event about SB445 implementation.

### Enforcement Actions (Mary Boyd and Brian Thompson)

The following tables show proposed and settled penalty actions since last month's report. In addition, proposed and settled action are available on our website at:

http://www.waterboards.ca.gov/sanfranciscobay/public\_notices/pending\_enforcement.sht ml

<u>mi</u>			
<b>Proposed Settlements</b> The following have been noticed for a 30-day public comment period. If no significant comment is received by the deadline, the Executive Officer will sign an order implementing the settlement.			
Discharger	Violation(s)	Proposed Penalty	Comment Deadline
San Francisco Public Utilities Commission	Unauthorized discharge of algaecide rinse water to Calaveras Reservoir resulting in a fish kill and stressed fish	\$15,000	Aug 28, 2017
Town of Hillsborough	Unauthorized discharge of chlorinated potable water to San Mateo Creek	\$221,030	Sep 6, 2017
Stuart and Eric Depper	Failure to submit technical reports	\$88,000	Sep 15, 2017

Unauthorized discharge of

344,000 gallons of untreated sewage to surface water

\$522,700

Sep 20, 2017

Settled Actions			
On behalf of the Board, the Executive Officer approved the following:			
Discharger	Violation(s)	Imposed Penalty	Supplemental Environmental Project
City of Petaluma	522,000 gallon sanitary sewer overflow (SSO) to surface water and SSO reporting violations	\$235,000	\$117,600
Lehigh Southwest Cement Company	Effluent limit violations of NPDES permit and Cease and Desist Order	\$375,000	\$195,000
Alum Rock Union Elementary School District	Failure to recertify for Industrial Stormwater General Permit coverage	\$5,000	

#### 401 Water Quality Certification Applications Received (Abigail Smith)

The table below lists those applications received for Clean Water Act section 401 water quality certification from June 22 through August 18, 2017. A check mark in the right-hand column indicates a project with work that may be in BCDC jurisdiction.

Project Name	City/Location	County	May have BCDC Jurisdiction
Ballena Isle Marina Pile Replacement	Emeryville	Alameda	$\checkmark$
Geo-Tech Surveys for	Fremont	Alameda	
Alameda Creek Bridge Replacement			
Emergency Repairs - Mines Road	Livermore	Alameda	
Lion Creek Streambank Stabilization	Oakland	Alameda	
Oakland Wharf Removal		Alameda	$\checkmark$
Stabilization of Arroyo De La Laguna at 7852 Foothill Road	Pleasanton	Alameda	
Infrastructure Improvements Along Estudillo Canal (Zone 2 Line A)	San Leandro	Alameda	
Phillip 66 Line 200 Repair	Concord	Contra Costa	
Canyon Road Bridge Crossing of Moraga Creek	Moraga	Contra Costa	
Phillips 66 Berm Investigation and Spillway Repair	Rodeo	Contra Costa	
6825 Sir Francis Drake Blvd – Rip Rap Installation for Bridge Abutment Support	Forest Knolls	Marin	
Larkspur Shores Dock Replacement	Greenbrae	Marin	$\checkmark$

Project Name	City/Location	County	May have BCDC Jurisdiction
Landslide Repair at MP 18.76, Sir Francis Drake Blvd	Lagunitas	Marin	
Larkspur Isle – Shoreline Stabilization Project	Larkspur	Marin	✓
Nora's Canyon – Sediment Removal Project		Marin	
Redwood Creek Trail – Bridge Replacement	Mill Valley	Marin	
Lucas Valley MP 9.6 Retaining Wall	Nicasio	Marin	
Emergency Culvert Repair – Limantour Road	Point Reyes National Seashore	Marin	
Water Quality Monitoring for Rangeland Pathogens on Parklands within the Olema Creek Watershed		Marin	
7 Hillgirt Creek – Bank Retaining Wall Repair	Ross	Marin	
130 Sir Francis Drake Blvd – Single Concrete Footing Repair	San Anselmo	Marin	
San Anselmo Concrete Removal		Marin	
San Anselmo Retaining Wall Repair		Marin	
Hunt Camp Trail Improvements	San Geronimo Valley	Marin	
Clamming Removal of Accumulated Sediment Site 1	San Rafael	Marin	
Clamming Removal of Accumulated Sediment Site 2		Marin	
Clamming Removing of Vegetation Overgrowth Site 3		Marin	
Loch Lomond Marina – Bank Stabilization and Erosion Control		Marin	~
Dunphy Park Improvement	Sausalito	Marin	✓
Sausalito Yacht Harbor Maintenance Dredging		Marin	✓
2017 Storm Drain Rehabilitation	Tiburon	Marin	✓
Tiburon Sugarloaf Slide		Marin	✓
Culvert Replacement –	Tomales	Marin	
Tomales Petaluma Rd			
29 Laurel Avenue – Retaining Wall Construction	Woodacre	Marin	

Project Name	City/Location	County	May have BCDC Jurisdiction
Gateway Village	American Canyon	Napa	
Pacific Union College Sewer Treatment	Angwin	Napa	
Plant - Riparian Veg Removal			
Emergency Streambank Stabilization -	Calistoga	Napa	
1327 Berry Street			
Bridge Preventive Maintenance	Napa	Napa	
Program			
Meigs Vineyard Bio Stream Crossing		Napa	
Simco Vineyard Road Realignment		Napa	
1460 Niebaum Lane –	Rutherford	Napa	
Streambank Stabilization			
Redwood Road Culvert Repair MP 4.0	Unincorporated	Napa	
Old Guadalupe Trail –	Brisbane	San Mateo	
Culvert Replacement			
Condominium Project –	Burlingame	San Mateo	
1509 El Camino Real			
SFO Perimeter Buoy	San Francisco	San Mateo	✓
San Mateo 25th Avenue –	San Mateo	San Mateo	
Grade Separation			
Regnart Road Emergency Repairs	Cupertino	Santa Clara	
Miller Residence –	Monte Sereno	Santa Clara	
Emergency Creek Stabilization			
1299 Leigh Avenue Outfall Repair	San Jose	Santa Clara	
450 West Santa Clara –		Santa Clara	
Bank Stabilization			
Almaden Dam Improvement Project		Santa Clara	
Geotechnical Investigations Phase 3			
Coyote Percolation Dam Apron Repair		Santa Clara	
Pond A8 South Gate Levee Repair		Santa Clara	
Markeley Lane Subdivision	Fairfield	Solano	
2213-2233 Shiloh Rd Culvert Removal	Rio Vista	Solano	
Suisun Marina Dredging	Suisun	Solano	✓
Lake Herman Quarry –	Vallejo	Solano	
Bridge Replacement			
Mare Island Dry Dock –		Solano	$\checkmark$
Maintenance Dredging			
Vallejo Ferry Terminal Dredging		Solano	✓
Bank Stabilization and Retaining Wall	Glen Ellen	Sonoma	
Grassy Waterway for Sonoma Creek 2		Sonoma	
Grassy Waterway for Sonoma Creek 1	Kenwood	Sonoma	

## **State Board Policies and Permits under Development**

The following is a list of statewide polices and permits under development. This table is an abbreviated version of what is routinely distributed as part of the State Water Board Executive Director's Report. The text in the table is largely unedited except for the deletion of extraneous information.

Policy / Significant Policy/General Permit	Status
Bacteria Standards for Ocean and Inland Surface Waters	The State Board is developing statewide bacteria water quality objectives and a control program to protect human health in waters designated for water contact recreation (REC-1). The bacteria water quality objectives are proposed to be adopted as amendments to the Statewide Inland Surface Waters, Enclosed Bays and Estuaries Plan, and the California Ocean Plan. The implementation elements also includes a general water quality standards variance policy. Staff released the draft documents for public comment on June 30, 2017. A Staff Workshop was held on July 10, 2017, and Public Hearing was held on August 1, 2017. Thirty-three comment letters were received. Staff is presently responding to the comment letters. State Board Web site: http://www.waterboards.ca.gov/bacterialobjectives/
Biostimulatory Biological Integrity Project	The State Water Board is proposing to adopt a statewide water quality objective for biostimulatory substances along with a program of implementation as an amendment to the Water Quality Control Plan for Inland Surface Water, Enclosed Bays and Estuaries of California. This project will also now include a water quality control policy to establish and implement biological condition assessment methods, scoring tools, and targets aimed at protecting the biological integrity in wadeable streams. A series of webinars and a stakeholder advisory group meeting have been held over the last few months as new science related to the project is released from the Southern California Coastal Watershed Research Program.
Blue Green Algae Action Levels	State Board staff is working with a multi-entity workgroup to collaboratively work toward solutions in protecting the public, pets, livestock, and wildlife from the effects of harmful algal blooms (HABs). A web portal has been developed and is available to the public to assist in tracking blooms and alerting the public to the possible risks. Additional resources are being developed, including more complete information on sampling and monitoring blooms, information sheets for veterinarians, physicians, and the public on symptoms and health effects, and possible mitigation measures. The CCHAB Network meets quarterly in January, April, July, and October. U.S. EPA recently released draft criteria for two cyanotoxins; microcystin and cylindrospermopsin.

Chlorine Amendment	The draft Total Residual Chlorine and Chlorine-Produced Oxidants Policy is being converted into an amendment to the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California.
General WDRs for Discharges of Waste Associated with Cannabis Cultivation Activities	DWQ, DWR, OE, and the Regional Water Boards are preparing statewide WDRs for discharges of waste associated with cannabis cultivation. The WDRs are being prepared in conjunction with DWR to address water rights issues and the CDFA (issuing cannabis cultivation licenses).
Industrial	State Board staff is developing an Industrial General Permit Amendment
General Storm Water Permit	to incorporate proposed TMDL implementation language into the statewide permit. The proposed permit amendment is being developed in
Amendment for TMDL Implementation	collaboration with the four Regional Water Boards that have adopted TMDLs applicable to industrial storm water discharges. State Board staff anticipates release of the proposed TMDL implementation language for public comment in Fall 2017. A State Water Board public hearing for the proposed permit amendment is anticipated in 2018.
2014 and 2016 Integrated Report Adoption	State Board Staff has combined the 2014 and 2016 California Integrated Reports and scheduled them for approval at a single State Board The complete 303(d) List portion of the California 2014 and 2016 Integrated Report will also be considered at a State Water Board meeting also scheduled for October 3, 2017.
Mercury TMDL and Implementation Plan (Statewide Reservoirs)	Staff from Regional Water Boards 2, 5, and State Water Board are developing a TMDL and implementation plan to address fish mercury impairments in about 150 reservoirs. Staff is preparing the scientific and technical analysis (source analysis, linkage, targets, allocations, and implementation plan options), and regulatory provisions for the implementation plan. The staff report is currently in scientific peer review.
Nonpoint Source (NPS)	The NPS Implementation and Enforcement Policy (NPS Policy) is being updated as directed by Resolution 2012-0004 to reflect the current
Implementation and Enforcement Policy	funding mechanisms regulation of nonpoint source wastewater discharges.
Amendments	
Phase I update of the Bay-Delta Plan: San Joaquin River flows and southern Delta salinity	Draft plan amendment to be brought to the State Board for consideration in early 2017.

Phase II Small Municipal Separate Storm Sewer System (MS4) Permit Amendment, Attachment G	State Board staff developed a proposed amendment for the Small MS4 Statewide General Permit, Attachment G (titled Region-specific Total Maximum Daily Loads (TMDL) Implementation Requirements). The proposed amendment includes: (1) new and revised implementation requirements based on corresponding TMDL wasteload allocations and (2) final compliance dates for the new and revised implementation requirements. These documents will be available to the public prior to the Board Hearing to consider adoption of the TMDL Amendments on December 19, 2017.
Phase II update of the Bay-Delta Plan: Comprehensive Review	State Board staff is in the process of a phased review and update of the 2006 Water Quality Control Plan for the Bay-Delta (2006 Bay-Delta Plan). The second phase of the review focuses on the following issues: (1) Delta outflow objectives, (2) export/inflow objectives, (3) Delta Cross Channel Gate closure objectives, (4) Suisun Marsh objectives; (5) potential new reverse flow objectives for Old and Middle Rivers; (6) potential new floodplain habitat flow objectives; (7) potential changes to the monitoring and special studies program, and (8) other potential changes to the program of implementation. Staff is also developing a Substitute Environmental Document that will provide an evaluation of the potential environmental impacts of the proposed changes to the Bay-Delta Plan. This document is expected to be released for public review in 2017.
Procedures for Discharges of Dredged or Fill Materials to Waters of the State	State Board staff is developing proposed Procedures for Discharges of Dredged or Fill Materials to Waters of the State. The draft procedures were released for public comments on June 17, 2016, and the Board held a hearing on July 19, 2016. The Comment period closed on August 18, 2016. Staff is reviewing comments and working on revisions to the policy, with a second public release in July 2017, a public workshop in August, and a Board hearing on September 6, 2017.
Revised Total Coliform Rule	The Federal Revised Total Coliform Rule became effective on April 1, 2016. Division of Drinking Water staff are drafting State regulations that are at least as stringent as federal regulations but include California- specific requirements. Staff anticipates releasing draft regulations in the spring of 2017 during public workshops, with a public review period later in 2017 and a proposed Board Adoption date in mid-2018.
Recycled Water Policy Update	The State Board adopted a resolution directing staff to amend the Recycled Water Policy and re-convene the Science Advisory Panel for Constituents of Emerging Concern. While the resolution outlined a preliminary list of topics to be updated or added to the policy, the resolution directs staff to work with stakeholders to develop an amendment to the Recycled Water Policy and release a draft for public comment by March 2018. State Board staff is also developing a project charter and timeline for the next update of the Recycled Water Policy. State Water Board staff conducted initial targeted stakeholder listening sessions in the beginning of March 2017 and is planning to conduct

	additional stakeholder outreach this summer and continue outreach throughout the amendment process.
Statewide	State Board staff has prepared a concept paper for developing a
General Waste	statewide general order for wineries. Staff is collaborating with
Discharge	stakeholders to prepare a draft requirements matrix. Staff continues to
Requirements	hold meetings with wine industry representatives.
Order for	
Wineries	
Statewide	State Board staff is developing draft permit language for the reissuance of
Storm Water	the Statewide Storm Water Construction General Permit (CGP). The
Construction	proposed CGP reissuance will include implementation of Total Maximum
General Permit	Daily Loads and revisions to update the CGP requirements per
Reissuance	information collected during the term of the existing permit. Information on the development of the proposed permit reissuance, including
	stakeholder outreach information, is posted on the State Water Board's
	Construction Storm Water Program website at:
	http://www.waterboards.ca.gov/water_issues/programs/stormwater/con
	struction.shtml. A proposed public comment period for the draft permit
	has not yet been determined.
Statewide	State Board staff is developing a statewide multi-agency framework for
Urban Pesticide	urban pesticide reduction that will be proposed as amendments to both
Reduction	the Inland Surface Waters, Enclosed Bays, and Estuaries Plan, and to the
	Ocean Plan. A multi-stakeholder project team is developing proposals for
	(1) an inter-agency coordination framework, (2) a regional monitoring
	framework, and (3) suggested permit language for MS4 permittees. Staff
	anticipates public release of the proposed amendments in Winter 2017.
Supplemental	Assembly Bill 1071 requires State Board to update SEP policy. Workshop
Environmental	held on 8/16/17 and public hearing on 9/20/17. Close of public comment
Projects (SEP)	on 9/25/17. Adoption hearing scheduled for 11/9/17.
Toxicity	A draft amendment was circulated to the various Regional Boards for
Amendments to	review and comment in October 2016. Three outreach meetings were
the Inland	held in April 2017 with various stakeholders to introduce the current draft
Surface Waters,	version of the proposed Provisions. The purpose of the meetings was to
Enclosed Bays,	receive feedback from stakeholder and interested parties on the
and Estuaries	proposed Provisions and to answer questions. Public Release is
Plan	anticipated for November 2017 with a Staff Workshop in December 2017
	and a Board Hearing in January 2018. The proposed amendment is
	anticipated to be presented to the Board for consideration in May 2018.