

Program News and Updates

Nerissa Wu, MPH, PhD
California Department of Public Health

Presentation to the Scientific Guidance Panel Meeting
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Updates to Biomonitoring California Staff

Kathleen Attfield

Swati Anand

Hyoung Gee Baek

Paramjit Behniwal

Reber Brown

Yu-Chen Chang

Key-Young Choe

Robin Christensen

Sabrina Crispo Smith

Josephine DeGuzman

Joginder Dhaliwal

Amy Dunn

Jeff Fowles

Julie Frankenfield

Ryszard Gajek

Qi Gavin

Songmei Gao

Sara Hoover

Shoba Iyer

Duyen Kauffman

Grace Lao

Ying Li

Susannah McKay

June-Soo Park

Julian Perez

Myrto Petreas

Sissy Petropoulou

Thien Phan

Laurel Plummer

Martha Sandy

Jianwen She

Dan Sultana

Karyn Taylor

Juan VillaRomero

Jed Waldman

Miaomiao Wang

ShiZhong Wang

Yunzhu Wang

Berna Watson

Nerissa Wu

Greg Yeh

Astrid Zamora

Rana Zahedi

Jun Qiang Zhou

Aloha (and Mahalo) to Michael DiBartolomeis

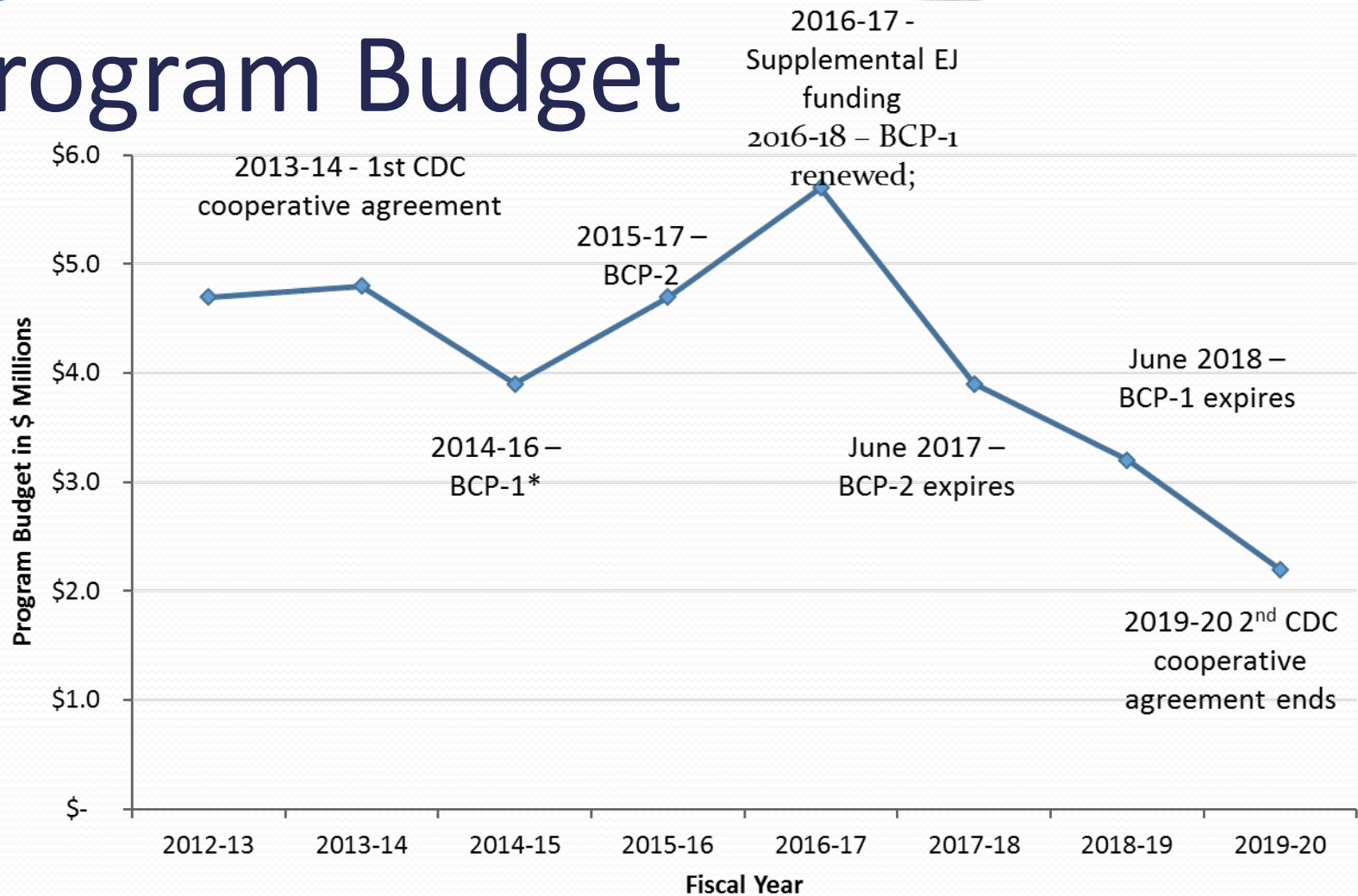


BIOMONITORING CALIFORNIA

MEASURING CHEMICALS IN CALIFORNIANS



Program Budget



Program budget was supplemented through the Budget Change Proposal (BCP) process as a temporary measure following the reduction in CDC funding.

Program Budget – Implications

- Inability to maintain laboratory panels
- Loss of laboratory capacity – slower turnaround time
- Inability to initiate new projects
- Reduction of the scope of existing projects

Main Priorities

- Statewide Representative sampling
 - Launching the multi-regional sampling plan
- Consumer product exposures
 - Measuring select analytes relevant to consumer products
 - Collaborating with the Safer Consumer Products Program
- Laboratory capabilities
- Environmental justice activities

Environmental Justice Activities

- Asian/Pacific Islander Community Exposures (ACE) Project
- Diesel exhaust exposure study
- Community outreach and engagement
 - Survey
 - Community meetings/webinars
 - Newsletter

Project Updates

	Sample Collection	Lab Analysis	Results Return
BEST (Arsenic retesting)	Complete	Complete	Complete
BEST (Perchlorate)	Complete	Projected: March 2017	Projected: April 2017
FREES	In-Progress	On-going	On-going
ACE I	Complete	Projected: June 2017	Projected: July 2017
ACE II	Projected: April 2017		

Multi-Regional Sampling (MRS)

Overview

- Divide the state into 8 regions
- Conduct sampling region by region, approximately 1 region/year
- Potential for nesting smaller studies within the MRS, to include, for example, additional chemical panels, multiple samples per participant, intervention studies



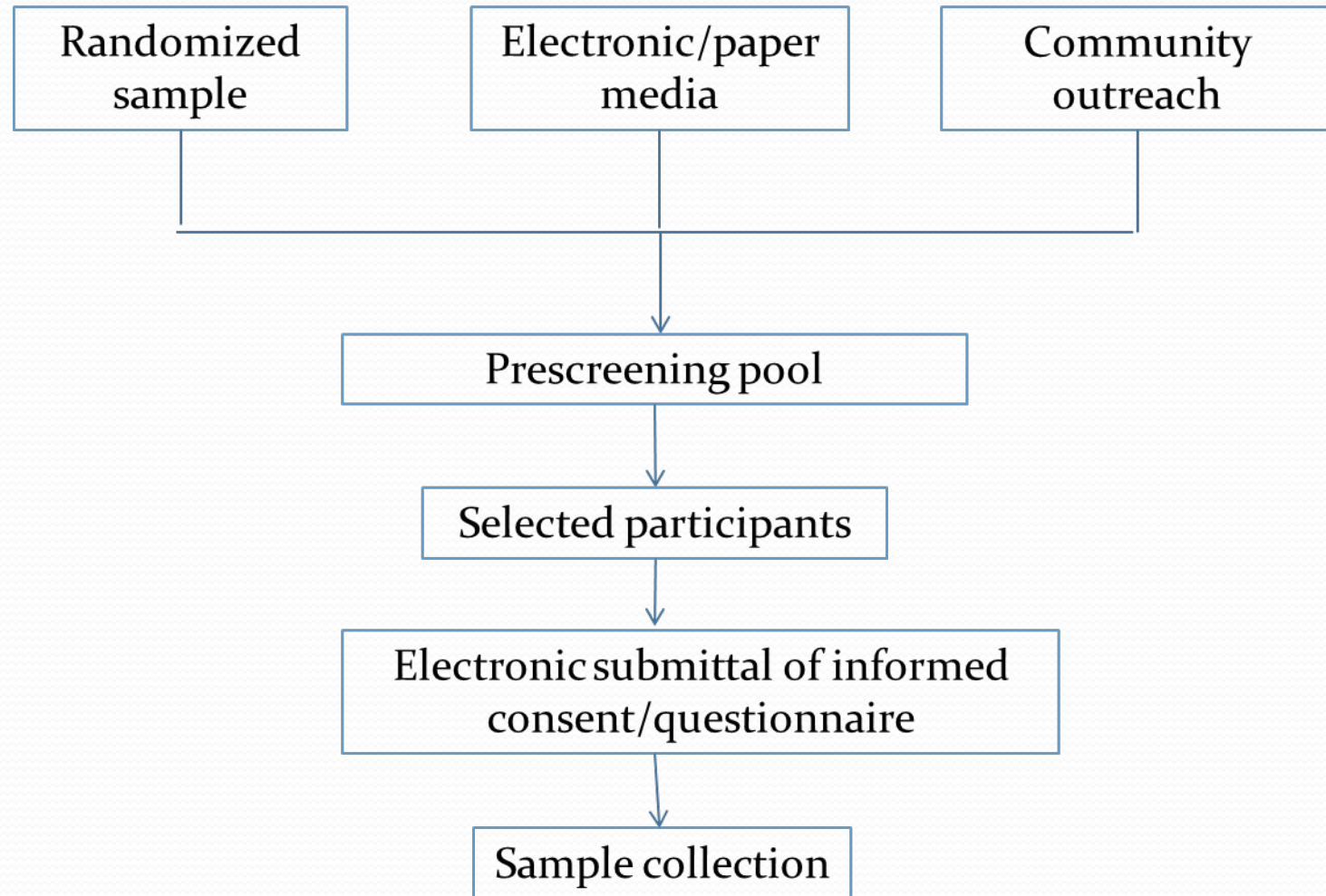
Multi-Regional Sampling: Key Questions

- How to successfully recruit participants?
 - Random recruitment vs community based recruitment
- How to select a representative sample?
 - Include the cultural and linguistic diversity of California
 - Include rural as well as urban communities
 - Represent highly exposed communities

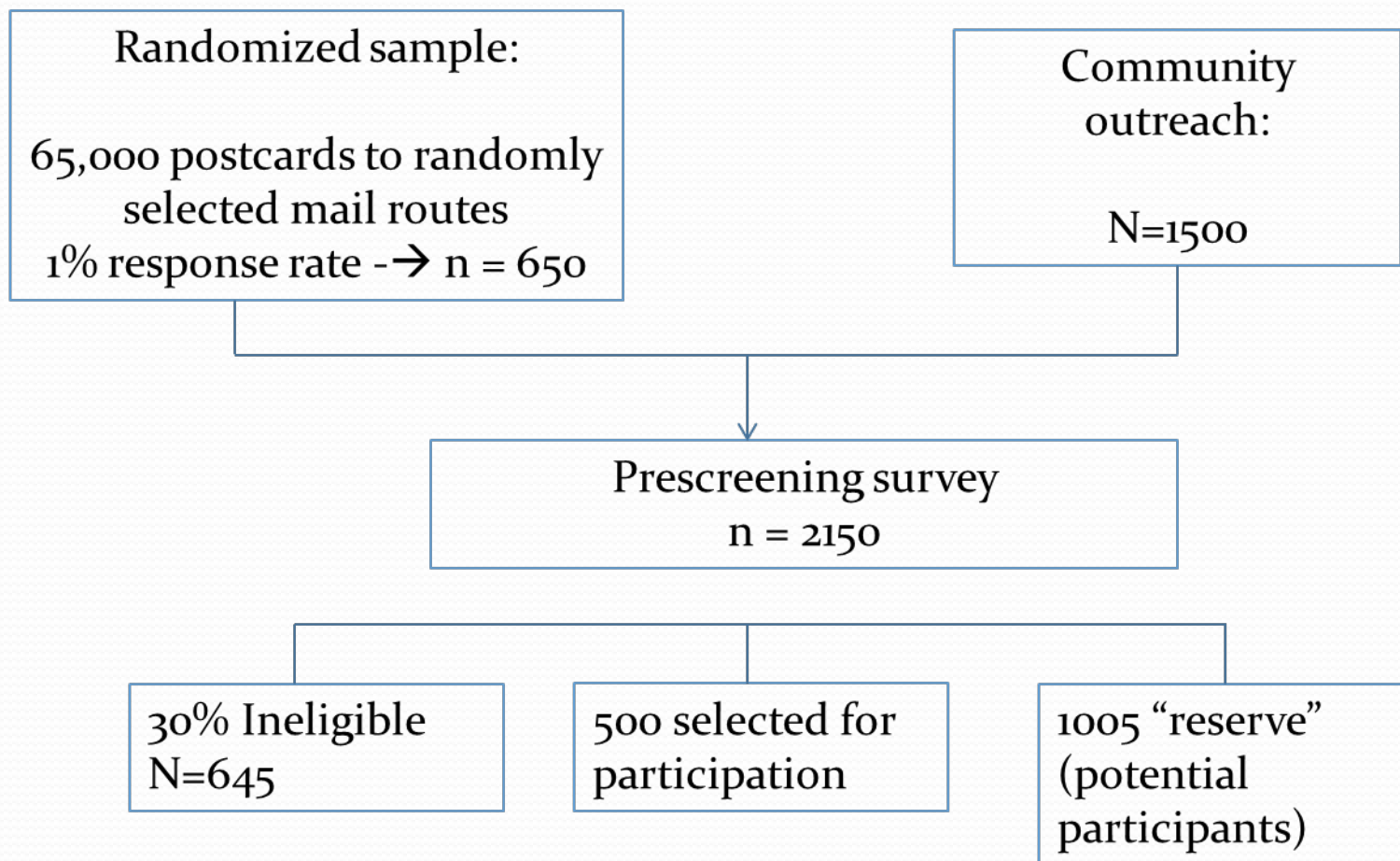
Region 1: The Pilot

- An opportunity to evaluate
 - Recruitment methods
 - Automated participant tracking
 - Sample collection protocols
 - Electronic results return

Multi-Regional Sampling Plan: The Overview



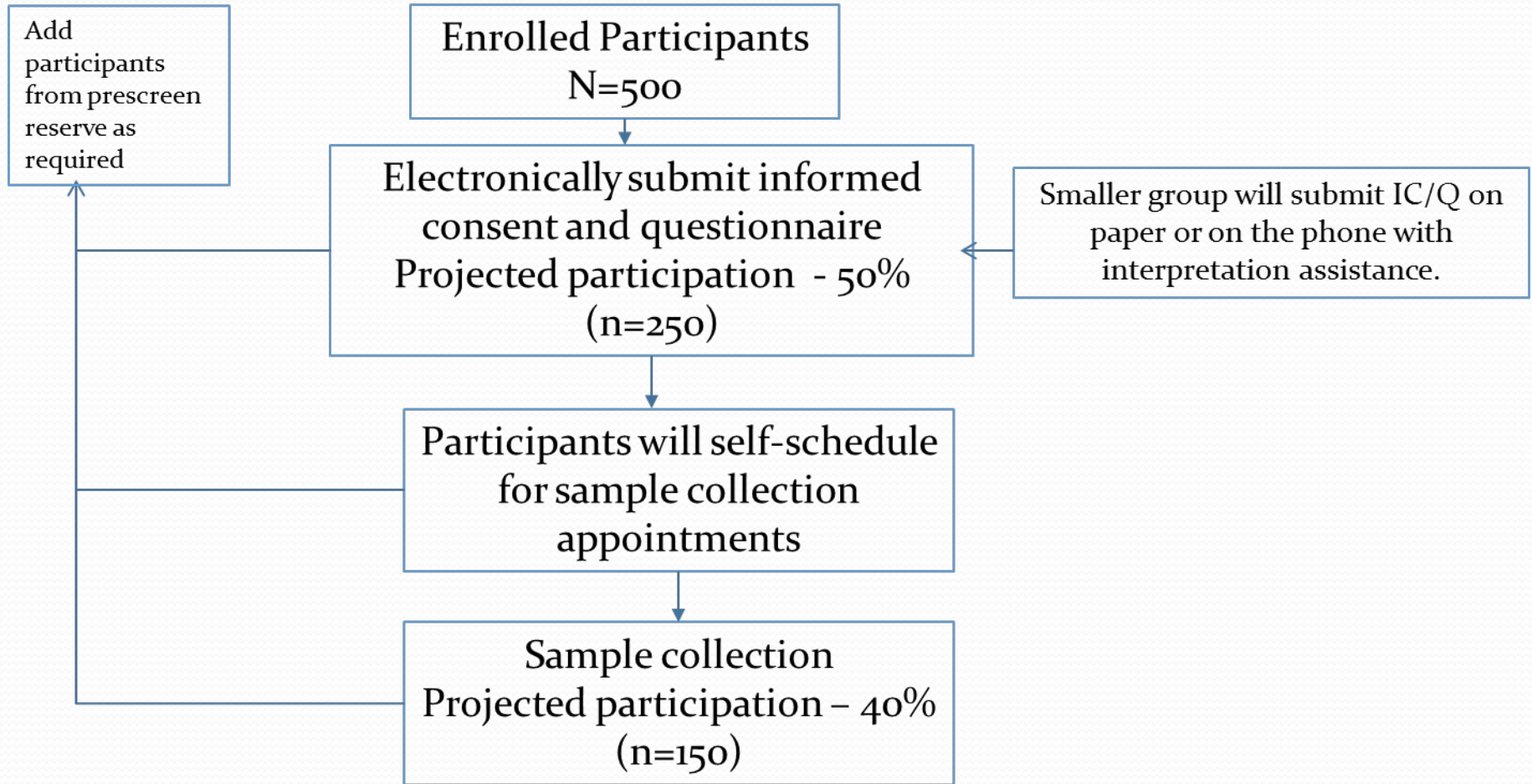
Multi-Regional Sampling Plan: Recruitment



Multi-Regional Sampling Plan: Sample Selection

	White	African-Am	Asian-Am	Hispanic
LA County	26%	8%	14%	49%
Proportionate Sampling	132	41	69	247
Adjusted Sampling (n=500)	130 (26%)	80 (16%)	90 (18%)	200 (40%)
Gold Country	52%	8%	14%	26%
Proportionate Sampling	156	24	42	78
Adjusted Sampling (n=300)	140 (46%)	50 (17%)	50 (17%)	60 (20%)

Multi-Regional Sampling Plan: Participant Management



Multi-Regional Sampling Plan: Participant Enrollment

- Selected participants will be mailed/e-mailed study packets including an Informed Consent
- Participants can electronically submit consent or submit a paper copy.
- Once enrolled, participants will be given access to an electronic questionnaire. Participants may opt for a phone interview instead.
- Questionnaire will be brief, to maximize participation
- Once the questionnaire is completed, the participant will be asked to schedule sample collection.



Sample Collection Protocol: Two Models



- **Sample Collection Events**

- Less expensive if many samples are collected
- Better control over sample storage conditions
- High overhead (site rental, staff)
- Really expensive if turn-out is low

- **Mobile Sample Collection**

- Allows for efficient use of staff time
- No site rental
- Labor intensive for staff
- Safety considerations

Multi-Regional Sampling Plan: Participant Tracking

Specific information about
open issues, activities, and
deadlines

Unique
home
page for
managers
and field
staff

Dashboard for Susannah McKay [Administrator]

Assigned to Me

You currently have no issues assigned to you. Enjoy your day!

Filter Results: Open and unassigned (PT)

T	Key	Summary	P ↓
<input checked="" type="checkbox"/>	PT-365	6081861955	
<input checked="" type="checkbox"/>	PT-363	6081846259	
<input checked="" type="checkbox"/>	PT-362	6081846259	
<input checked="" type="checkbox"/>	PT-361	6081861955	
<input checked="" type="checkbox"/>	PT-360	6081861955	
<input checked="" type="checkbox"/>	PT-359	6081861955 2017-02-06 17:37:09	
<input checked="" type="checkbox"/>	PT-358	6081846259 2017-02-06 17:25:50	
<input checked="" type="checkbox"/>	PT-357	6081812067 2017-02-06 16:56:59	
<input checked="" type="checkbox"/>	PT-356	6078114182 2017-02-01 21:09:49	
<input checked="" type="checkbox"/>	PT-354	test of configurations	

Issues on the map

Activity Stream

Your Company JIRA

February 15

- Susannah McKay [Administrator] removed the Assignee of 4674 - test move to lab
15/Feb/17 12:25 PM Comment

February 14

- Susannah McKay [Administrator] created LST4 - phlebotomists
14/Feb/17 3:53 PM Comment
- Susannah McKay [Administrator] changed the Summary of PT-334 to '0007005415'
14/Feb/17 11:51 AM Comment
- Susannah McKay [Administrator] changed the Assignee to 'Susannah McKay [Administrator]' on PT-334 - 2017-01-19 21:56:52 0007005415
14/Feb/17 11:51 AM Comment
- Susannah McKay [Administrator] changed the Assignee to 'Susannah McKay [Administrator]' on PT-387 - 6081861955
14/Feb/17 11:41 AM Comment
- Susannah McKay [Administrator] changed the Assignee to 'Susannah McKay [Administrator]' on PT-355 - 6078114182 2017-02-01 21:09:49
14/Feb/17 11:39 AM Comment
- Susannah McKay [Administrator] changed the Assignee to 'Susannah McKay [Administrator]' on PT-261 - 601827004
14/Feb/17 11:38 AM Comment
- Susannah McKay [Administrator] changed the Assignee to 'Susannah McKay [Administrator]' on PT-336 - 2017-01-19 20:32:19 8006605849
14/Feb/17 11:35 AM Comment
- Susannah McKay [Administrator] removed the name permission of PT-568 - 6081861955
14/Feb/17 11:25 AM Comment
- Susannah McKay [Administrator] changed the Assignee to 'Susannah McKay [Administrator]' on PT-366 - 6081861955
14/Feb/17 11:22 AM Comment

Customizable map of
participants

Multi-Regional Sampling Plan: Sample Analysis

- Metals (Hg, Cd, Pb, As) – what other metals should we be considering?
- PFASs (panel of 38 analytes) vs PFCs (panel of 12 analytes)

Multi-Regional Sampling Plan: Results Return

- Electronic results return (paper packet option)
- Select population for follow-up
 - Participants with elevated levels of metals flagged by our protocols
 - Participants with highest and lowest percentiles PFAS results
 - Follow-up questionnaires for select participants

Multi-Regional Sampling Plan: Proposed Timeline

- April 2017 – Meet with LA County partners to review protocol
- April – July 2017 – Finalize protocol and study tools
- August 2017 – Submit IRB protocol
- October 2017 – March 2018 – Community outreach
- January 2018 – Initiate recruitment

Multi-Regional Sampling Plan: Outstanding Questions

- Analytical panels
 - Additional metals
 - PFASs vs. PFCs
- Exposure questionnaires – how to prioritize which questions to include?
- Key stakeholders in LA County and other regions) to include in outreach
- Which region should be next?

Northern Coast
 Butte Modoc
 Colusa Napa
 Del Norte Plumas
 Glenn Shasta
 Humboldt Siskiyou
 Lake Sonoma
 Lassen Tehama
 Marin Trinity
 Mendocino

Gold Country
 Alpine Sacramento
 Amador San Joaquin
 Calaveras Sierra
 El Dorado Solano
 Mono Sutter
 Nevada Tuolumne
 Placer Yola
 Yuba

San Francisco/Bay Area
 Alameda
 Contra Costa
 San Francisco
 San Mateo
 Santa Clara

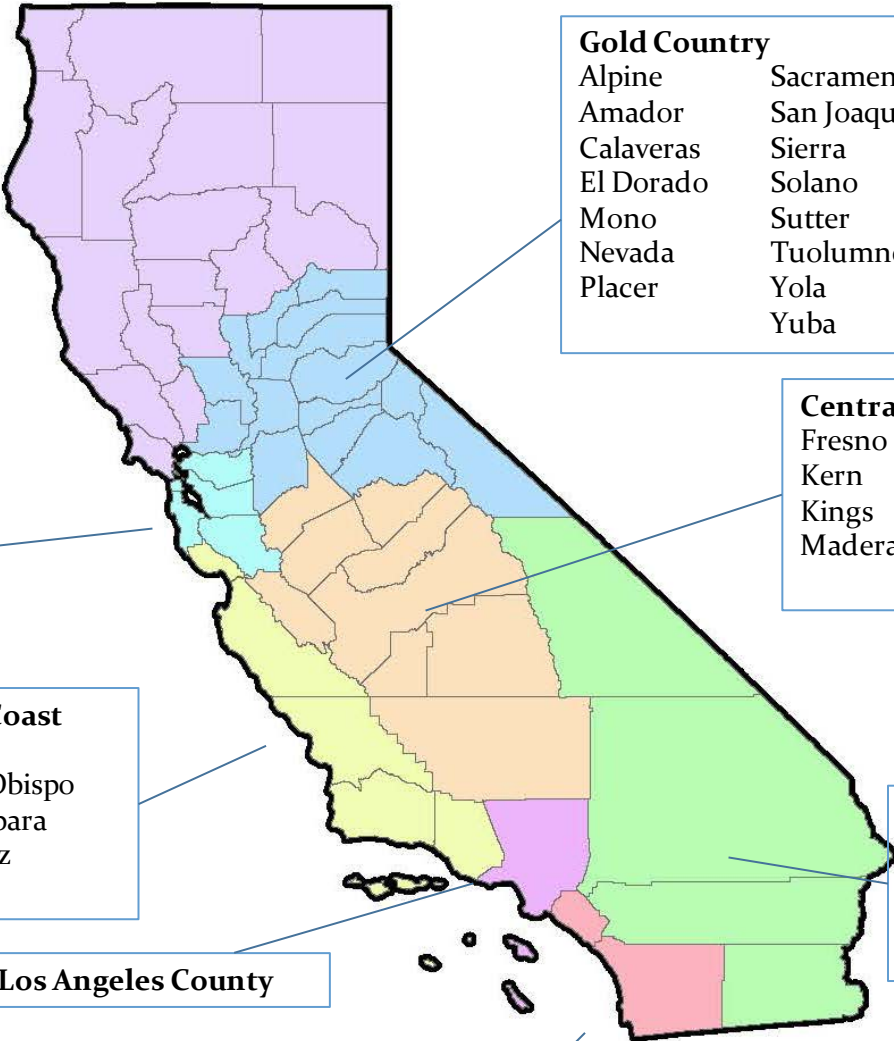
Central Valley
 Fresno Mariposa
 Kern Merced
 Kings San Benito
 Madera Stanislaus
 Tulare

Central Coast
 Monterey
 San Luis Obispo
 Santa Barbara
 Santa Cruz
 Ventura

Inland Empire
 Imperial
 Riverside
 San Bernardino
 Inyo

Los Angeles County

San Diego/Orange



**Multi-Regional Sampling Plan:
 Region 2?**