

US EPA ARCHIVE DOCUMENT

Progress Report on CPSP Activities
Multi-stakeholder Engagement, February 20, 2008, Washington, DC

Research Category	CPSP Project #	Project Description	Status
Epidemiology Studies/QMRA	P1, P2	Epidemiologic study at POTW-impacted marine beaches in Fairhope, Alabama and Goddard, Rhode Island –Water and Epi data collection –Data Analysis	Completed Water and Epi Data Collection. Ongoing Data Analysis.
	P3	Epidemiologic study at beach primarily impacted by untreated human sewage, in Avalon, California (Conducted by SCWWRP, Supported by EPA) – Water and Epi data collection –Data Analysis	Completed Water and Epi Data Collection. Ongoing Data Analysis.
	P4, P5	Epidemiologic study and/or QMRA in fresh or marine water impacted by agricultural animal sources (P4), urban runoff (P5)	Scheduled to start: 2009 Pending outcome of P11 (ag), P9(urban runoff)
	P6	Epidemiologic study at POTW-impacted marine waters	Under consideration (contingent on need based on 2007 studies)
	P7	Determine data components needed for QMRA	Initiated – Targeting completion by Spring 2008

Progress Report on CPSP Activities– Continued

Research Category	CPSP Project #	Project Description	Status
Site Characterization	P8	Study parameters that affect performance of qPCR signal for enterococci	Initiated – finalizing workplan
	P9	Collect data and conduct site and source characterization at potential study sites to determine the extent of specific animal sources, and factors influencing the extent to which they would contribute to fecal contamination at the beach	Initiated – reviewing list of potential sites
	P10	Expand spatial scale of collection of site-specific data at epi study locations to support predictive modeling and QMRA	Initiated – expanded data set to be completed by Spring 2008
	P11	Conduct site and source characterization studies to better understand the factors influencing the contribution of untreated sources (e.g., urban runoff) to total fecal contamination to ambient waters	Initiated – reviewing list of potential sites
	P12	Design and evaluate monitoring approach to account for spatial and temporal variability with water samples	Initiated – defining tasks and workplan
	P13	Develop, refine, evaluate quantitative sanitary investigation method protocol	Scheduled to start in 2009
	P14	Pilot sanitary survey in Great Lakes	Initiated – received final reports from grantees; summarizing results into final report

Progress Report on CPSP Activities - Continued

Research Category	CPSP Project #	Project Description	Status
Indicators/ Methods Development and Validation	P15	Evaluate multiple indicator/method combinations to develop quantifiable relationships	Pending results from P1, P2, and P3
	P16	Study effects of sampling holding time, sample storage, and preservation on sample integrity	Initiated – analysis to be completed by Spring 2008
	P17	Develop, refine, validate, and publish new ambient and wastewater test methods	Initiated – Selection of additional methods for validation (Spring '08), Validation workshop (May '08), Validation protocol (Summer '08)
	P18	Evaluate suitability of individual combinations of indicators and methods for different CWA programs	Pending results from P15
	P19	Develop new and/or evaluate previously published source-identifying assays	Initiated – collection and analysis of reference samples; selected PCR and qPCR assays
	P20	Evaluate human assays with water samples with different levels of fecal contamination from wide geographic range to supplement site characterization and quantitative sanitary investigation	Initiated – sample collection from EPA's Rivers & Streams Survey and Gulf of Mexico program

Progress Report on CPSP Activities - Continued

Research Category	CPSP Project #	Project Description	Status
Indicators/ Methods Development and Validation	P21	Evaluate genetic markers for cows to supplement site characterization and quantitative sanitary investigation	Initiated - collection and analysis of reference samples selected PCR and qPCR assays (4 PCR and 3 qPCR)
	P22	Reanalyze archived NEEAR samples for other indicators	Pending outcome of P16, P1, P, P3
Modeling	P23	Pilot test Virtual Beach for beach notification and advisories/closures	Initiated — selecting sites for model validation studies
	P24	Refine and validate existing water quality models for freshwater beach notification and advisories/closures	Initiated — selecting sites for model validation studies
	P25	Refine and validate existing water quality models for marine beach notification and advisories/closures	Initiated — selecting sites for model validation studies

Progress report on CPSP Activities - Continued

Research Category	CPSP Project #	Project Description	Status
Appropriate Level of Public Health Protection	P28	Evaluate applicability of NEEAR Great Lakes data to inland waters	Initiated – defining project scope and leveraging EPA's Rivers & Streams Survey
	P29	Conduct statistical analysis of children data from epi studies	Initiated – see P1, P2, P3
Literature Reviews	P30	Conduct state-of-science reviews of published studies to characterize relative risks from different sources	Report completed; analysis ongoing
	P31	Conduct state-of-the-science review on occurrence and cross-infectivity of specific pathogens associated with animals	Report completed; analysis ongoing
	P32	Conduct literature review and evaluate and interpret available data on indicator behavior in tropical climates	Report completed; analysis ongoing