

# Approximate Cost for Developing and Finalizing the UASM Guidance Document

## Background:

The goal of a unified approach to stormwater monitoring (UASM) in southern California is to establish a standard set of methodologies for various monitoring activities under NPDES permits. A guidance document for UASM could delineate such methodologies to ensure consistency in monitoring elements across different monitoring programs in the region. Such standard methods would be flexible to recognize the variability among the watersheds under different stormwater agencies in terms of hydrogeology, topography, climate and land use. At the same time, methods described in the UASM guidance document would reflect on the available scientific literature for stormwater monitoring.

Based on a review of existing monitoring practices in southern California, we have identified a lack of scientific information and regional studies which preclude developing detailed standardized protocols for the MS4 monitoring elements. Research is needed to establish the best practices for runoff sample collection, data analyses, and data management to reliably answer a set of standardized monitoring questions. Specifically, the following questions need to be addressed prior to developing UASM guidelines:

- ✓ How to identify qualifying storm event and address biases resulting from first-flush phenomenon in a watershed?
- ✓ What factors to consider when selecting an outfall for dry weather monitoring?
- ✓ How many storms should be monitored per water year?
- ✓ What should be the minimum sampling frequency per site and optimum sampling duration per sampling event?
- ✓ What organic contaminants should be in the priority list for every MS4 program?
- ✓ How to best use MS4 monitoring results to evaluate gradual improvement of stormwater quality?
- ✓ How to integrate MS4 monitoring results with reasonable assurance analyses for adaptive stormwater management?

## Tasks, Schedule, and Budget:

Five tasks were outlined for the SMC to address the existing data gaps in MS4 monitoring methods in southern California and develop the UASM guidance document. The tasks are the following:

1. Standardize qualifying storm events
2. Develop a guideline on how to select sampling sites while planning for MS4 monitoring
3. Standardize field-sampling procedure
4. Standardize laboratory analytical methods
5. Standardize data analyses and reporting format

Below is a table of approximate costs for each stand-alone task. For tasks that rely on similar data (e.g., Tasks 1 and 5), costs will be reduced since data compilation only needs to occur once.

TASK	APPROXIMATE SCHEDULE	APPROXIMATE COST (\$1,000's)
1. Standardize qualifying storm events	12 - 18 months	\$60 - 100
2. Develop a guideline on how to select sampling sites while planning for MS4 monitoring	9 - 12 months	\$50 - 75
3. Standardize field-sampling procedure	9 - 12 months	\$50 - 75
4. Standardize laboratory analytical methods	9 - 12 months	\$50 - 75
5. Standardize data analyses and reporting format	18 - 24 months	\$100 - 150
All 5 Tasks	24 - 36 months	\$200 - 325