An aerial photograph of a coastal city, likely Santa Monica, California, showing a dense urban grid and a coastline. The left side of the image is overlaid with a solid blue color, which serves as a background for the text.

Optimizing Safe, Clean Water Capture Opportunities in NSMB

Scientific Studies Program

Fiscal Year 2025-2026

North Santa Monica Bay

Craftwater

Brad Wardynski



Study Overview

Investigates the potential benefits, costs, and Regional Program viability of alternative scales and types of stormwater capture projects in NSMB





Study Team & Location

Technical Team



CRAFTWATER



HERRERA

Science + Planning + Design

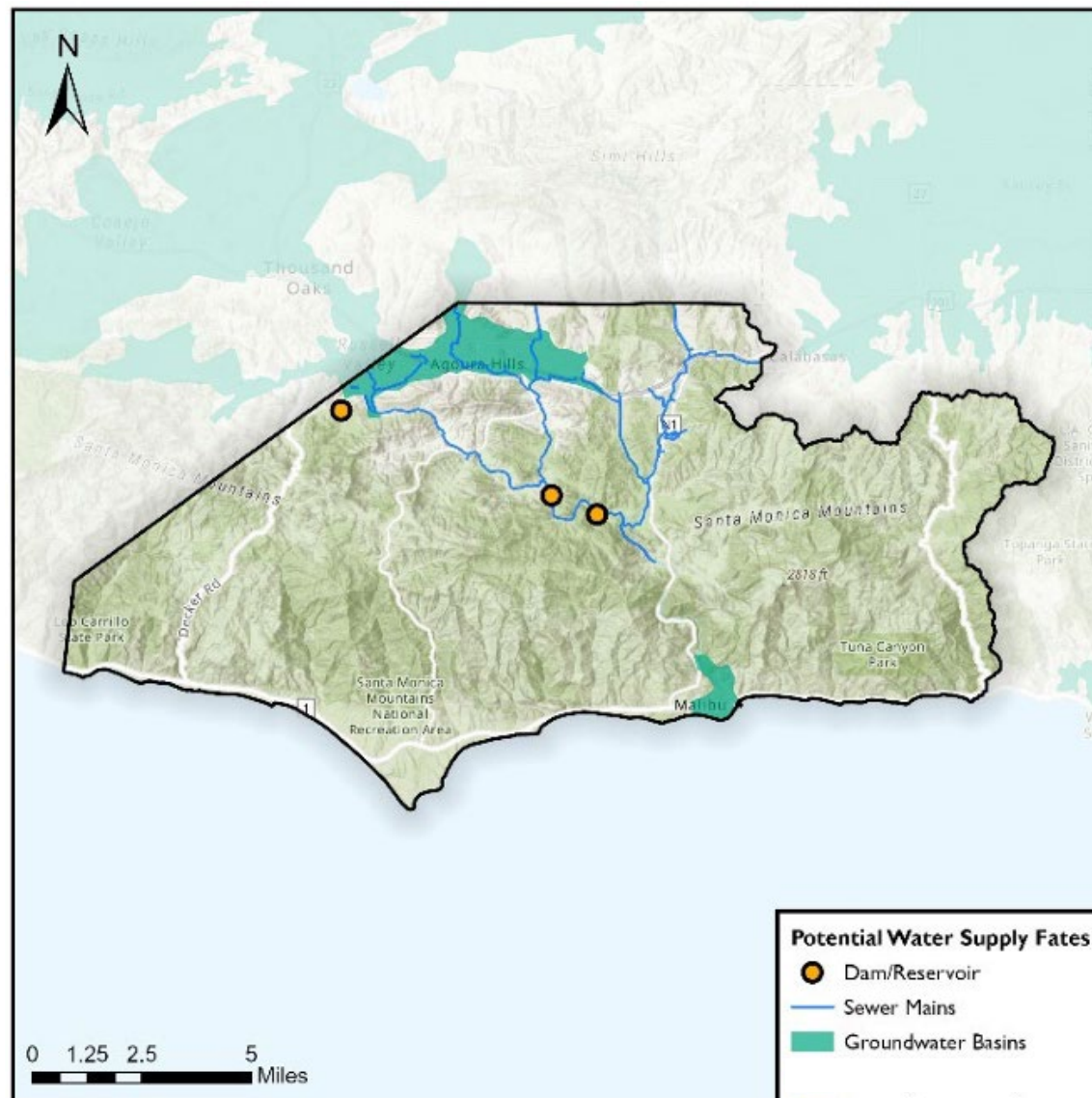


OLAUNU

Collaborators



ARLA



Source: SCWP Watershed Planning Framework
Watershed Area Characteristics Summary



Problem Statement



- The NSMB is very unique
 - Lack of managed aquifers in majority of Watershed Area
 - Runoff generally drains to canyons and natural creeks instead of concentrating in large storm drains
 - High-flow events in steep topography are flashy and challenging to manage
- SCWP Goals - particularly related to runoff capture and water supply - do not always align with NSMB needs and opportunities



Objective

Investigate the viability of...

- **Bundling parcel-scale distributed stormwater capture** for infrastructure program funding
- **Siting large-scale, distributed stormwater capture and storage** to capture runoff during high peak flow events
- **Actively coordinating the release of runoff to downstream treatment facilities** (i.e., wastewater reclamation/advanced purification) when capacity is available



Source: TreePeople



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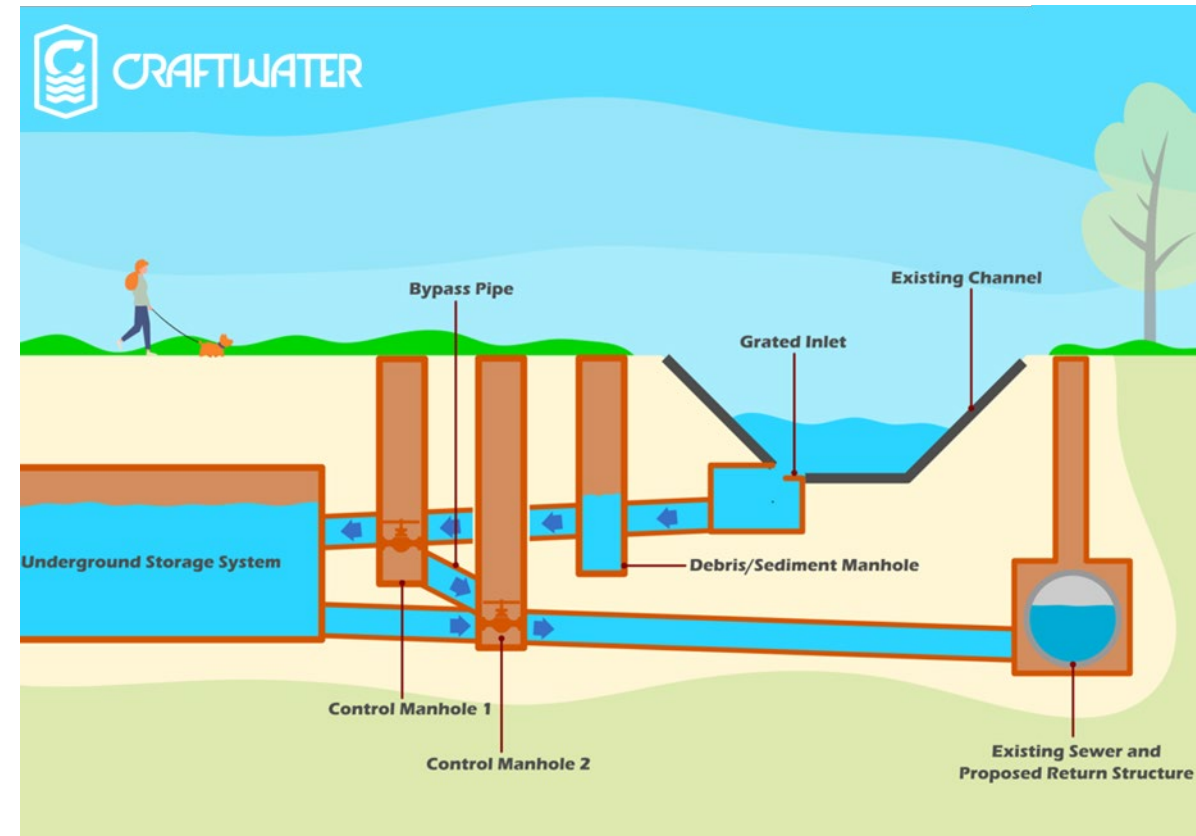




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Phase 1: Concept Viability

Task 1: Initial Engagement and Literature Review

Task 2: Runoff Availability and Scoring Viability

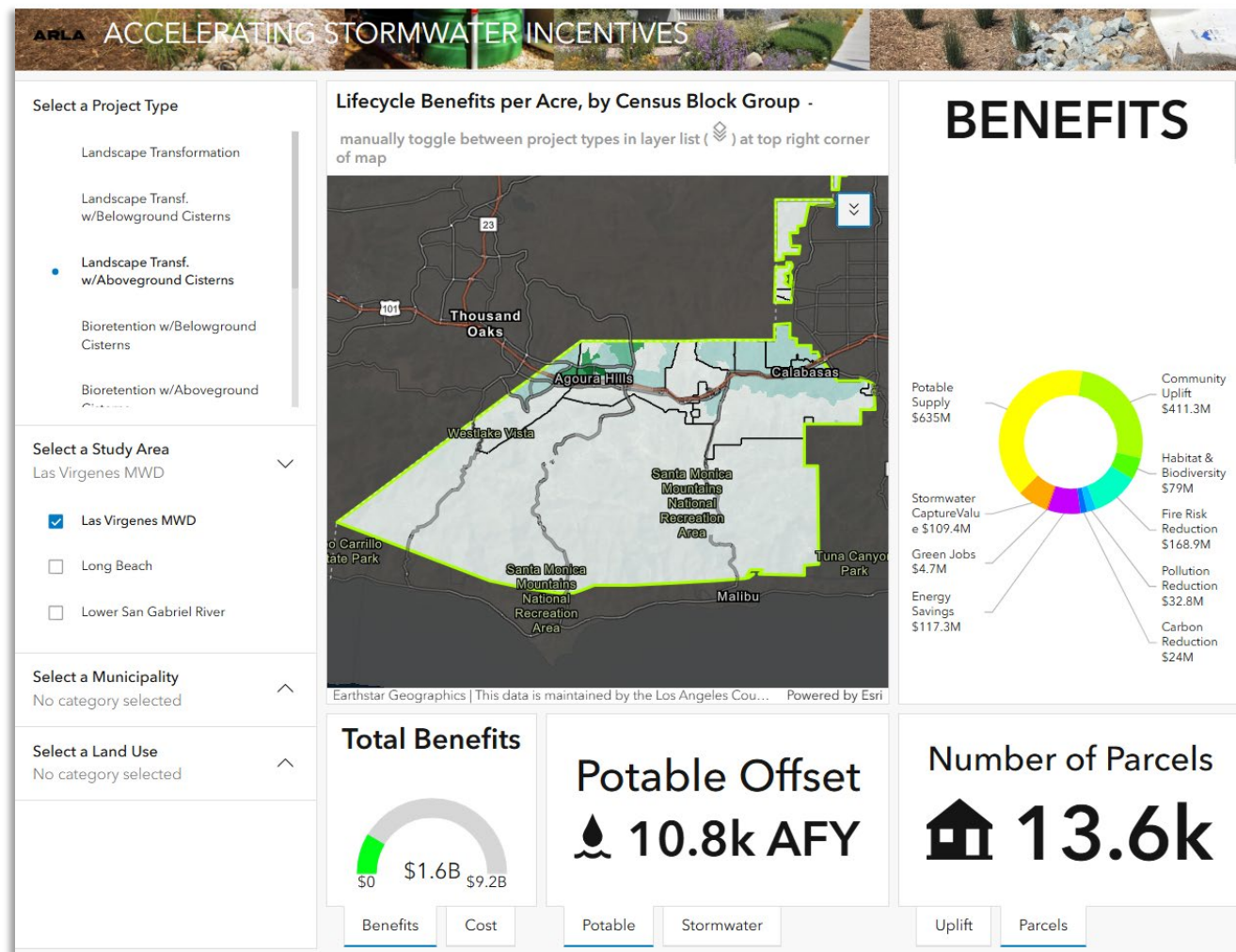
Task 3: LA County Public Works Coordination

Task 4: Opportunity Screening (Large-Scale and Parcel-Scale)

Task 5: Document Permitting Roadmap

Task 6: Prioritization

ARLA Parcel-Based Retrofit Incentives Dashboard





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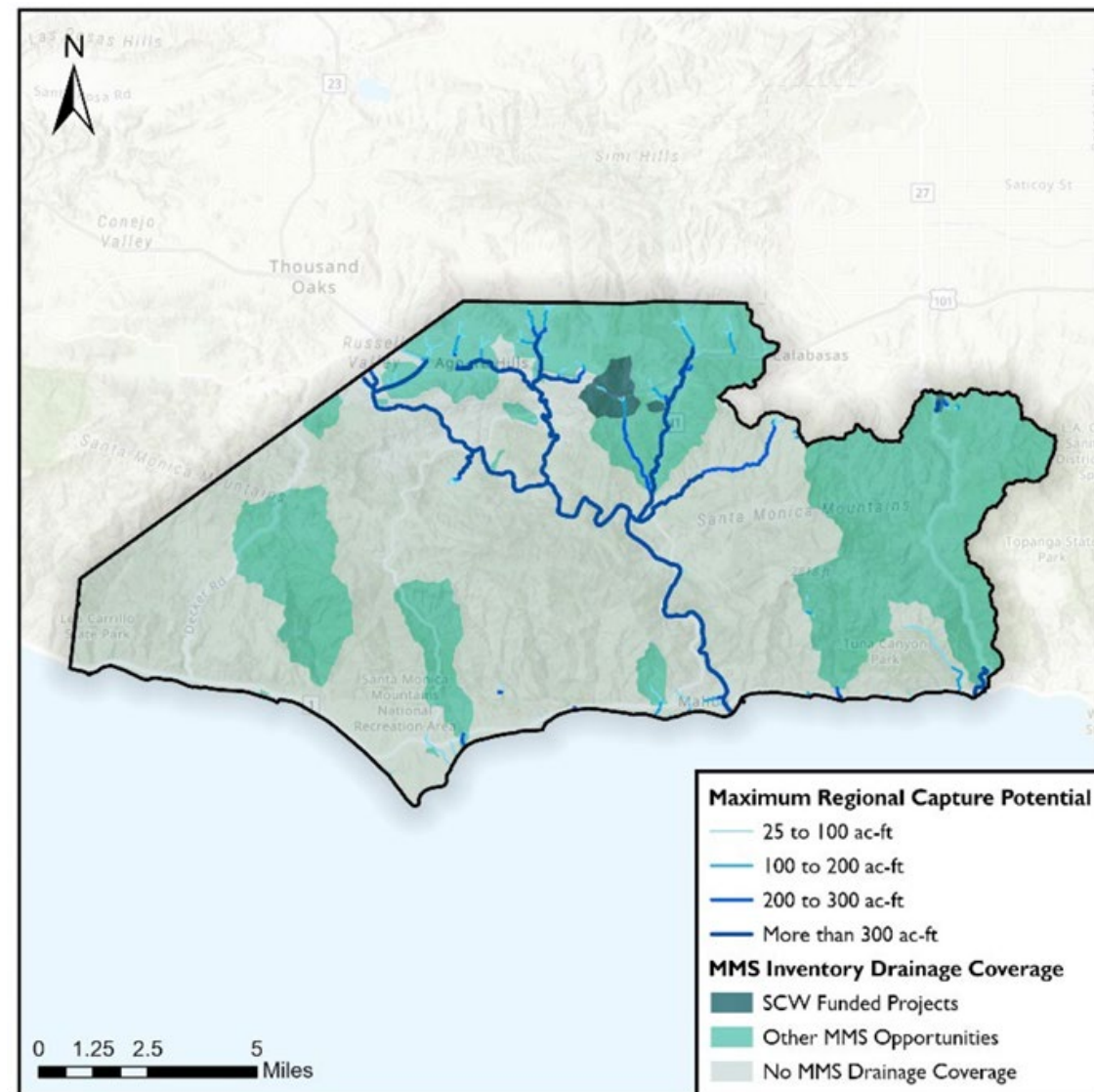
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SCWP MMS: Runoff Capture Potential





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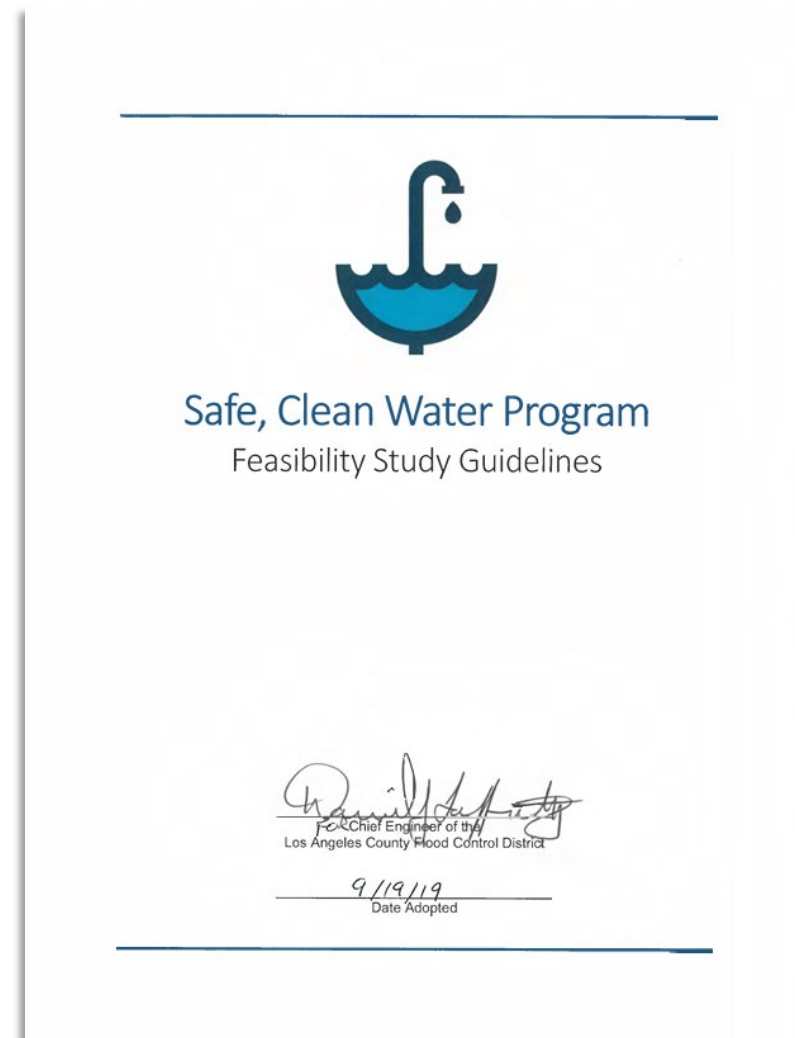
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Feasibility Study Guidelines





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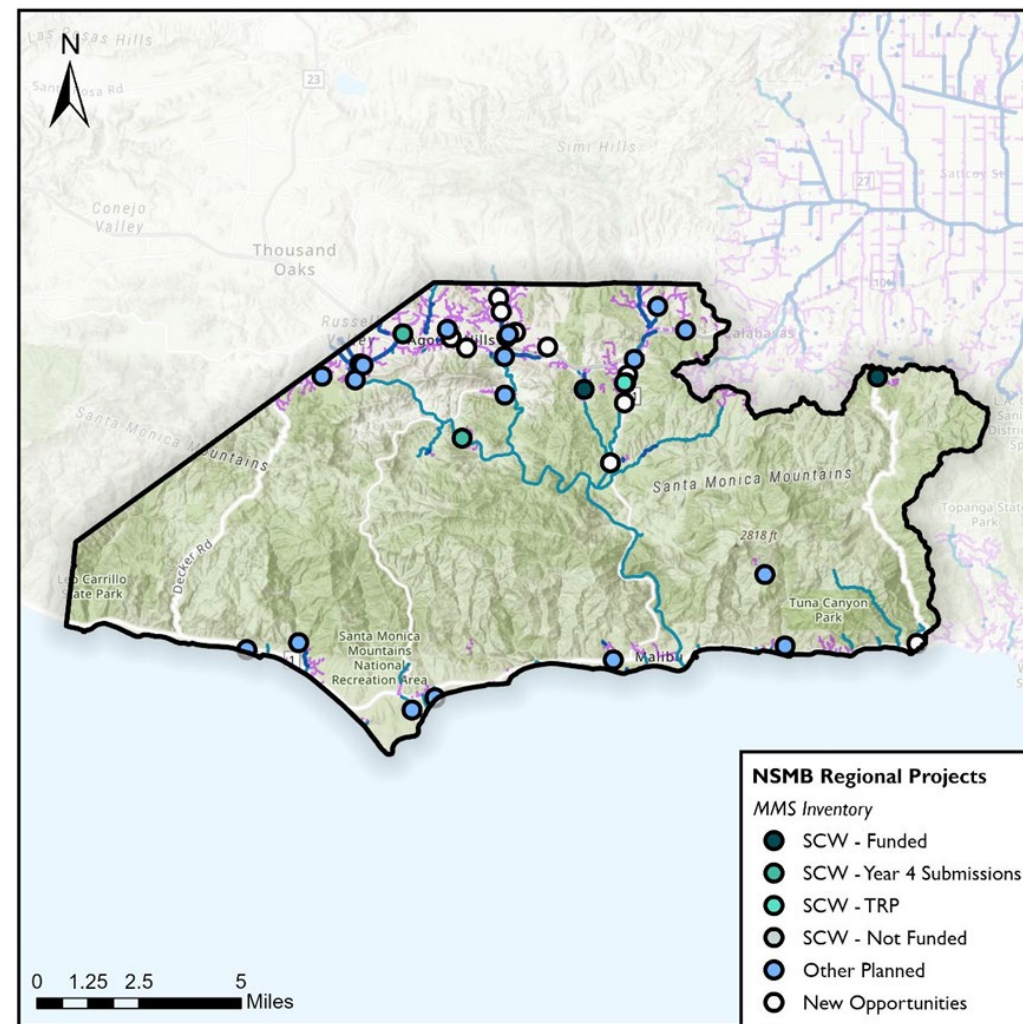
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SCWP MMS: Project Opportunity Inventory





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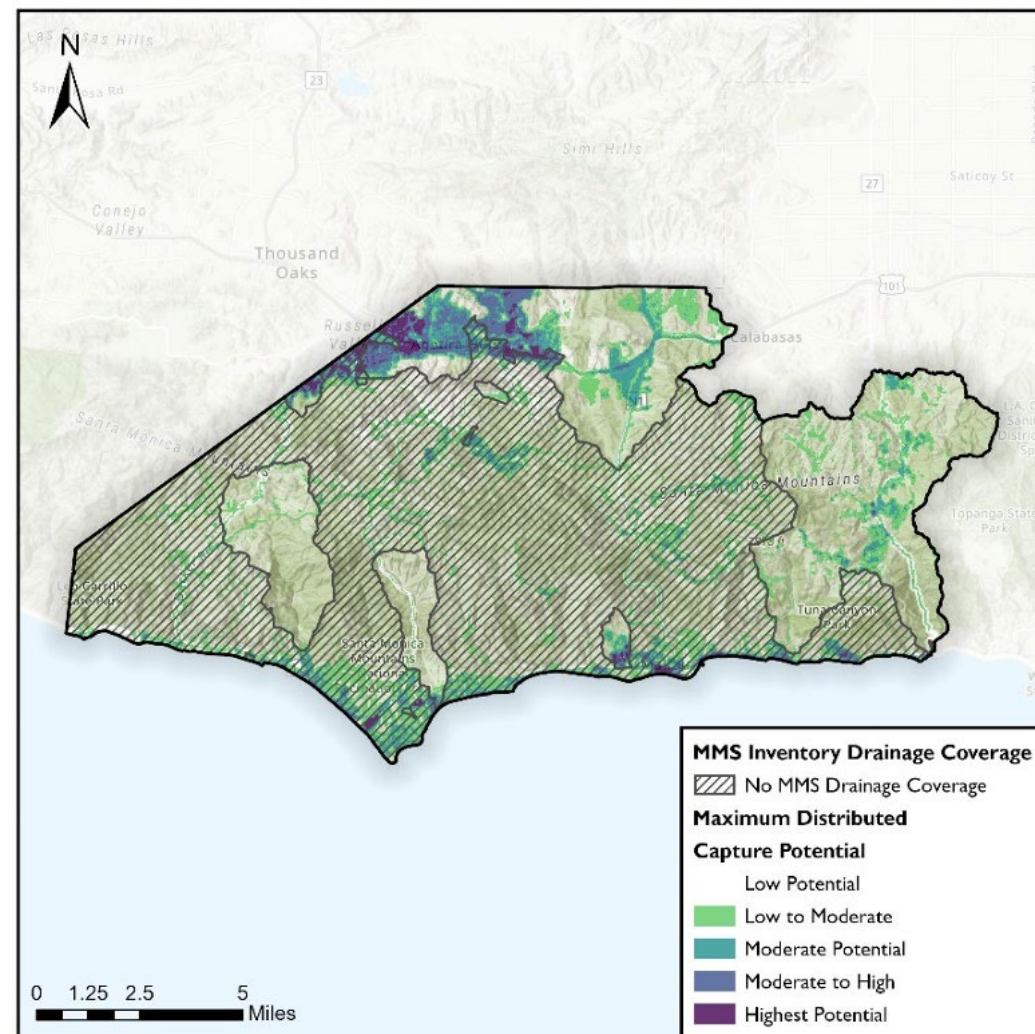
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SCWP MMS: Distributed Capture Potential





Phase 2: Landowner Engagement, Site Selection, & Feasibility

Next steps not included in this funding request – for reference only

- **Local Interested Party Engagement**
- **Prioritization Updates**
- **Landowner Engagement and Site Visits**
- **Pre-feasibility Study**





Cost & Schedule

Phase	Description	Cost	Completion Date
1	Concept Viability	\$293,000	12 months after funding transfer
2	Landowner Engagement, Site Selection, & Feasibility	TBD – not part of this request	
TOTAL		\$293,000	

- Cost-efficiency was achieved by combining two studies (parcel-scale and larger-scale evaluations)
- Expediency will be achieved by leveraging available datasets (e.g., ARLA, MMS)



Summary of Benefits

- Identifies cost-effective strategies to provide **Water Quality Benefits**
- Validates alternative scales to achieve **Water Supply Benefits** in NSMB
- Investigates opportunities for flood reduction **Community Investment Benefits**





Questions?