# Monitoring and Evaluation of California Natural Resources Agency Investments

#### **EXECUTIVE SUMMARY**

The Monitoring and Stewardship Unit (MSU) was developed in the Fall of 2018 to guide the creation of a centralized monitoring and evaluation system for the California Natural Resources Agency (CNRA) departments, boards, conservancies, councils and commissions (hereafter referred to as "offices") administering bond funding. The system would be used to track the long-term (i.e. at least 10 years) performance of projects following their successful completion. Currently, each of the CNRA's 26 offices is required to monitor projects and easements to confirm compliance with grant or other legal agreements, even though bond funding is usually insufficient to cover those costs. Each office has established their own criteria for assessing impact on the projects that have been funded. There are currently over 16,000 bond-funded projects overseen by the CNRA offices.

As part of a preliminary assessment to understand the status of completed bond-funded projects and inform the development of statewide monitoring protocols, the MSU evaluated a statistically representative random sample of 389 completed projects across Proposition 84, 1, and 1E. Figure 1 shows the proportion of projects from this bond evaluation sample for which long-term post-completion project monitoring data were evident (7%), compared with those projects where monitoring data or plans were not found or not relevant for the project type (e.g. planning/research investments).



Resulting from the preliminary assessment, the MSU identified 4 challenges CNRA should address:

## 1. Post-completion project monitoring is not conducted consistently across CNRA offices.

To date, the lack of a centralized system with standardized monitoring protocols and tools for project management, data collection, and analysis has resulted in a variety of unique accountability strategies across CNRA bond programs. Even when post-completion project monitoring is stipulated, performance data are not often available. For example, about ¼ of a random stratified sample of CNRA bond-funded projects formally required post-completion monitoring (the light blue boxes of Figure 1) yet only about ⅓ of that subset evidenced such data collection in the long-term in the documentation provided (indicated by the dark blue dots). Where monitoring was evident, protocols and standards for the collection and management of data noticeably varied. This assortment of data management practices across offices, combined with the limited availability of performance data, restricts data aggregation and performance analyses at regional and statewide scales.

## 2. Many offices lack funding for long-term monitoring, operations and maintenance.

Funding for program support costs is typically limited to five percent of the original bond allocation. This limitation results in enough funding for staff to support program development and project implementation through project close out but leaves little-to-no funding for post-project completion monitoring. While some offices have managed to use their base operational budget for monitoring and maintenance or have written requirements for grantees to perform these duties, these practices are not universally applied.

#### 3. There are no protocols in place to standardize monitoring.

The lack of commonly-defined standards for tracking the performance of projects post-completion hinders the comparability of one project to another—even across similar types of work. Monitoring and evaluation protocols vary project to project by necessity (to capture the nuances of practices conducted or the project site itself). Common metrics, however, could be identified and applied to similar project types and/or themes such that future analysis could be conducted at the project, program, regional, or statewide level. Establishing these common metrics and aggregating the resulting data collected with other existing information will allow CNRA bond investments to be evaluated for effectiveness across project types, geographic regions, or resources management styles.

# 4. Statewide data collection and management is not centralized with sufficient quality assurance and quality control protocols.

The Agency Bonds Consolidated Reporting System (ABCRS) is the bond accountability reporting tool used by CNRA offices currently. ABCRS has a lack of formalized, Agency-wide quality assurance and quality control (QA/QC) protocols for data entry and management, possibly contributing to a prevalence of errors and discrepancies with other related systems. Such errors may be exacerbated by the duplicate reporting of financial information in multiple systems.

## **PROPOSED STRATEGY:**

In the near term, the MSU will take a methodical approach to address the 3 organizational challenges above (1, 3 & 4), in collaboration with the relevant CNRA offices and with guiding policy direction from CNRA leadership. The remaining challenge is financial in nature and critical to the development of a centralized monitoring and evaluation system. Future policies could be developed to address these funding needs.

The MSU initial goals are:

- Develop a centralized system for financials, grant information, and performance metrics with standardized monitoring methods, tools, and improved QA/QC protocols (challenges 1 & 4) and
- Identify key goals, objectives, indicators, and metrics that are appropriate for long-term monitoring depending on the project category or type (challenge 3).

This includes recommendations to improve the current reporting system by: 1) augmenting existing QA/QC protocols for data entry, 2) providing the requisite training to the personnel responsible for data entry, and 3) developing an interface that transfers information across existing databases to reduce redundant data entry by individual users, thereby decreasing the possibility of human error.

Concurrent to establishing these QA/QC protocols, the MSU, collaboratively with key stakeholders, intends to develop common standards for tracking the long-term performance of bond-funded projects awarded under CNRA programs. This process will start by identifying the key goals, objectives, indicators, and metrics (in that order) appropriate to monitoring the long-term performance of projects on both spatial and temporal scales. The resulting data generated will be housed in an information system or database which may be aggregated with other existing datasets to supplement informational gaps.

When the near-term objectives are complete, consistency in data collection and management can be established across CNRA offices, which may allow for monitoring resources and data to be shared and analyzed more easily. For example, with a centralized system and consistent monitoring protocols established, analysis could be conducted across a range of projects or geographic locations to inform on the success of a management practice, or an area's resilience to some climate-related event. Furthermore, staff across CNRA offices could coordinate monitoring and evaluation efforts on related work, thereby reducing the overall costs and time spent by State employees to track and maintain completed projects. Policies can be developed, to maximize existing monitoring resources or to provide new resources, to help address insufficient funding for monitoring and evaluation (challenge 2).

With time, this improved ability to analyze CNRA's investments based on standardized data gathered from these monitoring efforts will support adaptive management practices, inform decision making and enhance the long-term stewardship and sustainability of the State's natural resources.