

CAPITAL CONSTRUCTION CONTRACT CHANGE ORDER
MANAGEMENT AND ADMINISTRATION:

OPPORTUNITIES IDENTIFIED TO STRENGTHEN PROCESSES AND OVERSIGHT STRUCTURE

Santa Clara Valley Water District Board of Directors
May 12, 2020



Background

Audit Objective:

Are potential improvement opportunities present in the construction change order process?

*In the next
15 years*

67
Capital Projects

\$5.16B


Acknowledgements

Thank you to all audit participants.

- Watersheds Design and Construction Division
- Water Utility Capital Division
- Construction Services Unit
- Dam Safety and Capital Delivery Division
- Purchasing and Consultant Contracts Services Unit
- Financial Planning and Management Services Division
- Capital Improvement Project Committee Members
- Former Dispute Resolution Board members
- Construction contractors
- Board members

Audit Highlights

The audit examined construction contract change order business processes from initiating a change order to reporting on change order activities to the Board of Directors.



Current change order process was designed for smaller projects

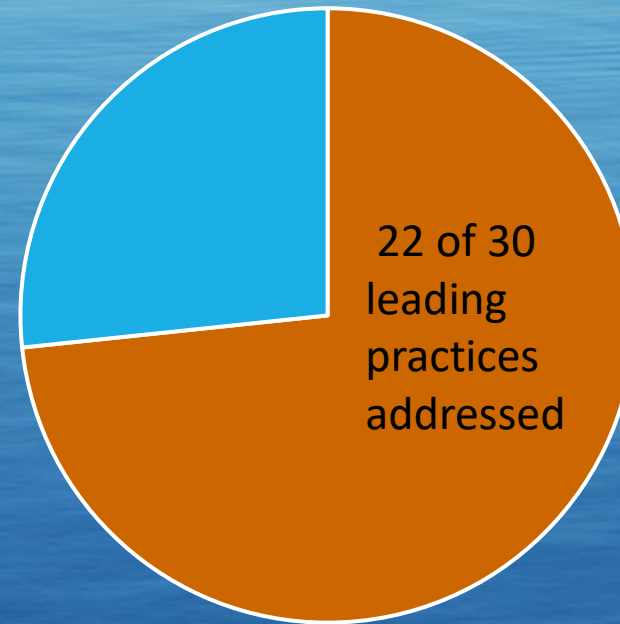
Large Dollar, Mega Projects

Critical need to update change order process for larger capital projects

Audit Finding #1

Use of leading practices

Opportunities are present to better align valley water change order management and administration to leading practices.



Gaps in leading practices identified.

Audit Finding #2

Change order processing, reviews
and approvals

*Change order management
and administration needs
uniform implementation and
other enhancements.*

Audit Finding #3

Support systems

Root cause of change orders is attributed to the absence of strong support systems to aid project and construction managers.

Recommendations

The recommendations included in the final audit report are designed to mitigate the potential service and financial risks created by the issuance of change orders on large-scale capital construction projects.

7 Recommendations

Management generally agreed with all of the recommendations, and in some instances, has already taken action to address to them. Management did have exceptions to some of the specific suggestions outlined in the audit report that we provided additional comments.

Recommendations

1

Update capital construction change order policies and procedures

2

Enhance constructability reviews as part of the construction project design phase

3

Enhance the review and approval process for change orders

4

Create a Resources Services Office

5

Transfer the responsibility to administer procurement activities on capital projects

6

Promote the uniform implementation of change order management and administration

7

Develop, track, and report on performance metrics

Audit Scope and Approach

- Construction contracts change order process
- Water Utilities, Dam Safety and Capital Delivery, Watershed Divisions, CIP Committee, and DRB Members

- Reviewed construction contract change order policies and procedures and compared to best practices.
- Interviewed COO's, managers, project managers, construction managers, Capital Improvement Program (CIP) Committee members, District counsel staff, Valley Water (VW) contractors, former Dispute Resolution Board (DRB) members to discuss potential improvement opportunities.
- Examined the use of the Quality Environmental Management System (QEMS) applicable to project management.
- Examined review and authorization structures and activities.
- Analyzed 34 change orders associated with six capital construction projects completed in CY '17 and '18 (6 projects).
- Conducted root cause analysis attributed to change orders to the extent possible. For this analysis, we relied on agency and expert interviews coupled with the results of our review of change orders.