STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT – Cheryl Prowell
MEETING DATE: December 16, 2015

ITEM: 7

SUBJECT: **Case Prioritization in the Site Cleanup Program**

DISCUSSION: Earlier this fall, staff created a formalized prioritization system for our Site Cleanup Program (SCP). We have used this system to screen about 700 cases of groundwater pollution in our region that need cleanup to identify our highest priority cases and create a defensible and transparent system to ensure that we are working on the cases with the greatest threats to human health and the environment, working with the most capable dischargers, and providing good customer service. Below are the specifics; we will provide examples in our staff presentation.

Background

When the Board's soil and groundwater cleanup programs were getting started in the 1980s, we prioritized cases in high-priority groundwater basins, notably the Santa Clara Valley and the Niles Cone in southern Alameda County, where groundwater is actively used as a drinking water supply. We elaborated on this approach in the 1990s and early 2000s with beneficial use evaluations for several important groundwater basins, notably the Westside Basin in northern San Mateo County, the East Bay Plain, and the South Bay basins. These evaluations provide general guidance but do not specifically prioritize cases. We completed our first formal case prioritization exercise in 2002, but it was difficult to maintain and was not updated. Since then, we have been prioritizing sites informally on a case by case basis using similar principles.

For case prioritization to be a useful part of our cleanup oversight process, it must balance a number of competing goals – protecting human health and water quality, recovering most of our staff's oversight costs, and facilitating Brownfield redevelopment. These goals do not always align. Additionally, a given case's priority may change significantly in response to new information received during the course of our oversight. For example, the case's priority would go up if we learn it has impacted or has the potential to impact a nearby drinking water supply well.

SB445 (Hill) took effect in January this year and increased the importance of SCP case prioritization. Before SB445, we had very limited resources to work on SCP cases unless the discharger for the case was enrolled in our cost recovery program to reimburse our oversight costs. SB445 (and its Site Cleanup Subaccount) provides staff resources starting this fiscal year to work on our highest-threat cases, but does so by shifting 20 percent of our SCP cost recovery staff resources to the Site Cleanup Subaccount. Therefore, starting this fiscal

year, we need to cut back on our work on lower-priority SCP cost recovery cases without impacting our higher-priority cases. At the same time, we have seen a significant uptick in requests for oversight at new Brownfield redevelopment sites and in pressure for increased oversight of our existing caseload. This has motivated us to create a defensible and transparent system to ensure that we are working on the highest priority SCP cases in both our existing cost recovery program and the new Site Cleanup Subaccount program.

Description of the Prioritization System

The prioritization system we have developed comes in two flavors, one for SCP cost recovery cases and one for SCP non-cost recovery cases. The latter includes inactive cases as well as new cases we expect to discover as we implement specific SB445 projects (e.g., our project to identify historic dry cleaner sites in priority groundwater basins). The different flavors are mainly due to the different funding mechanisms: we depend on discharger reimbursement of our oversight costs for SCP cost recovery cases, and we have Site Cleanup Subaccount funding for the non-cost recovery cases.

Prioritization of *SCP cost recovery cases* considers three elements: threat to human health and the environment, discharger capacity, and customer service. The system uses data already available in our GeoTracker database wherever possible, so as to minimize data entry and ultimately facilitate an automated prioritization report within GeoTracker. We selected a scoring mechanism that provides a spread in overall scores (i.e., clearly identifying the highest priorities) while providing a fairly equal weighting of the three elements in the overall score.

The *threat* element considers four factors: the number of supply wells near the cleanup site, the number of supply wells impacted by groundwater contaminants, and two environmental indicators – control of groundwater contaminant migration and control of human health exposure. For groundwater contaminant migration and human health exposure, the system weighs documented threats the highest, with lower priority given to unknown conditions, and the lowest priority to well-characterized sites that do not pose a threat.

The *discharger capacity* element considers two factors: the discharger's ability to pay cleanup expenses and willingness to conduct cleanup. This element recognizes that working in cooperation with dischargers provides more environmental benefit for a given amount of staff time than enforcement against responsible parties who are unwilling or financially incapable of conducting cleanup.

The *customer service* element acknowledges a range of different stakeholders that can be impacted by site cleanup: the nearby community, developers, and other Water Board programs.

Prioritization of *SCP non-cost-recovery cases* considers those three elements plus one more to address funding criteria specifically mentioned in SB445: the

cost and potential environmental benefit of cleanup and whether the site is located in a small or financially-disadvantaged community. The scoring mechanism and range of scores is similar to that for SCP cost recovery cases.

Results

In September, we used this system to prioritize 466 SCP cost recovery cases and tentatively prioritize 221 SCP inactive cases. Summary results are shown in Appendix A: figure 1 for the SCP cost recovery cases and figure 2 for the SCP inactive cases. Each figure arranges the cases from lowest to highest priority and shows how each prioritization element contributes to each case's overall priority. Overall scores range from 3 (lowest priority) to 35 (highest priority).

In figure 1, a relatively few SCP cost recovery cases have high priority scores. Only about 19% scored over 15 and only about 8% scored over 20. This result should make it easier to focus on our high-priority cases and largely verifies that we have been working on our highest priority cases. Conversely, there are only minor differences in priority score for the bottom 50% of the cases. This result suggests that we can slow oversight for the bottom 40% rather than stopping work entirely on the bottom 20%.

The pattern is similar in figure 2 for the SCP inactive cases. Only about 9% scored over 15 and only about 1% scored over 20. However, these are initial results and may change once we complete our screening of the inactive cases, start overseeing the highest priority inactive cases, and start generating new cases from various SB445 projects.

Conclusions

This prioritization effort has allowed us to focus our attention on our highest priority SCP cases. Section leaders in our two cleanup divisions are making determinations with their staff regarding how to proceed on the lowest priority cases, either stopping work entirely or providing minimal oversight as time allows. We are also beginning to identify "backlogged" cases that may be good candidates for cleanup using grant funding provided by the State Water Board under the new Site Cleanup Subaccount or warrant extra enforcement actions to protect human health and the environment.

This prioritization system is designed to be evergreen and to demonstrate how priorities change as conditions change. We anticipate re-evaluating our cases on an annual basis to ensure that we continue to provide optimal case management within our available resources. We will provide the Board with an updated status report in future, as we gain experience with this prioritization system and as we apply it to new cases.

RECOMMEN-
DATION: This is an information item only and no action is necessary.

Appendix A: Case Prioritization Summary Results

Appendix A

Case Prioritization Summary Results

Figure 1: Prioritization Results for SCP Cost Recovery Cases

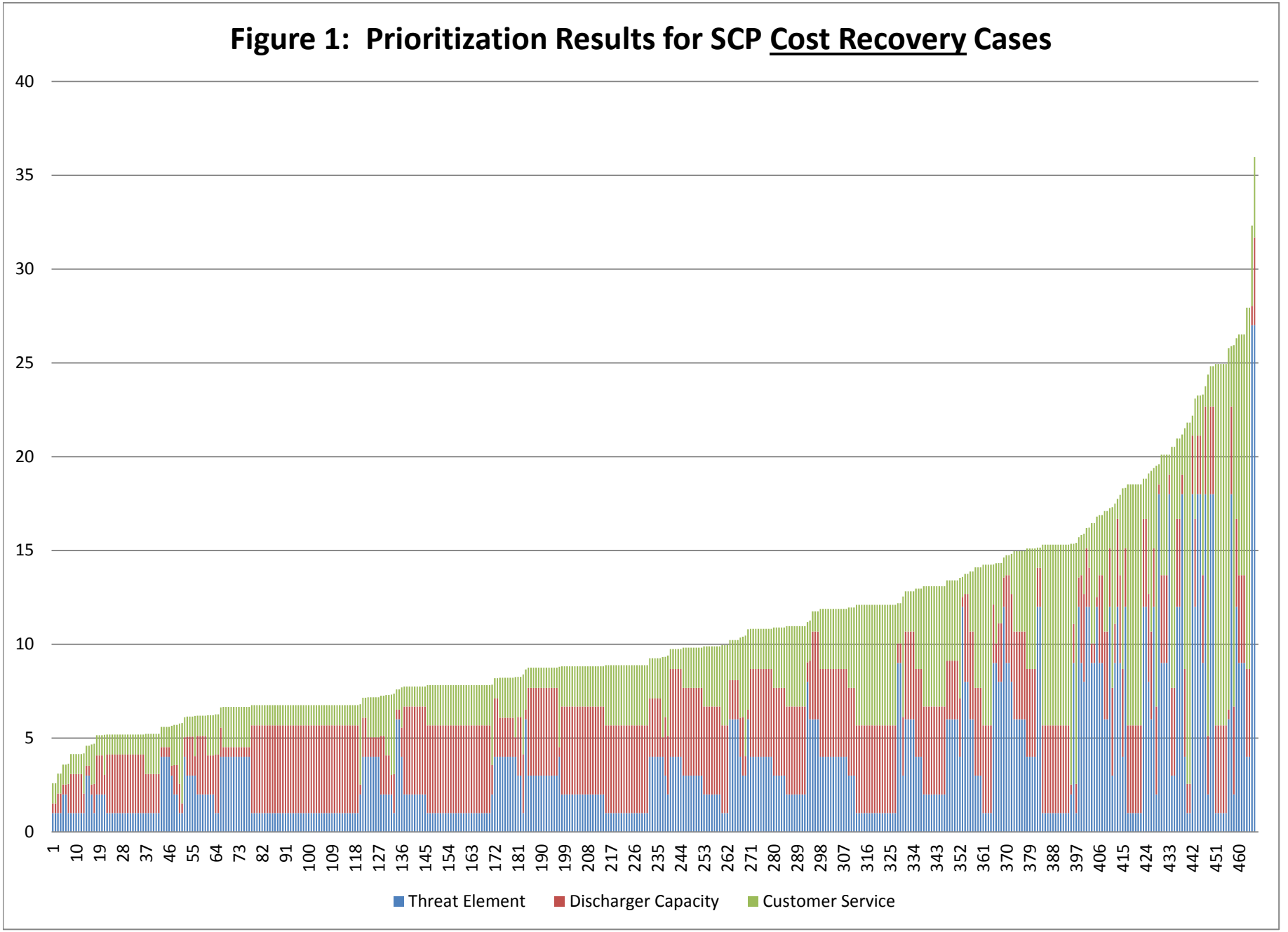

Figure 2: Initial Prioritization Results for SCP Inactive Cases