9. The Clean Water Enterprise's Organizational Structure

- There is no single Clean Water Enterprise responsible for all expenditures of clean water revenues. Instead, the City's clean water functions are currently divided between a number of divisions, and managed by two separate City departments.
- This results in a fragmented organizational structure which does not foster a unified business identity for clean water staff. As a result there is no one executive management team member responsible for clean water, no integrated Clean Water Enterprise Fund business plan, the Clean Water Master Planning process is not being managed by the Clean Water Enterprise Program's experts in clean water operations and planning, hydraulic engineering services are provided by another department, there are unclear management accountabilities for clean water regulatory requirements, and the Water Pollution Control Division is still not integrated into the Department, either culturally or in terms of policies and procedures.

Disaggregated Clean Water Functions

There is no single Clean Water Enterprise responsible for all expenditures of clean water revenues. Instead, the City's clean water functions are currently divided between a number of divisions, managed by two separate City departments, the Public Utilities Commission and the Department of Public Works. This results in a fragmented organizational structure.

Issues Caused by Structural Disaggregation

This structural disaggregation of functions does not foster a unified business identity for clean water staff that is characterized by shared goals, shared long-term planning capacity, functional coordination, efficiency, clear decision-making, or clear accountability lines. As a result:

- There is no executive management team position dedicated to clean water; instead different executive management team members are responsible for separate clean water functions. Clean water staff perceive that this disaggregated responsibility adversely impacts clean water advocacy at the executive management team level in terms of policy, program operations, and capital improvement investments.
- There is no integrated business plan for the Clean Water Enterprise which sets annual and long-term business goals and the investment decisions necessary to achieve them. One of the results of this lack of integrated business planning is that the Public

Utilities Commission Administration determines the Clean Water Enterprise's contribution to the Department's overhead costs without the benefit of a full analysis of the Clean Water Enterprise's actual administrative support needs.

- The Clean Water Master Planning process is being managed out of the General Manager's Office and the Infrastructure Division, rather than by the Clean Water Enterprise Program's experts in clean water operations and planning.
- Although the Water Pollution Control Division has its own environmental engineering capacity, the hydraulic engineers responsible for sewer design are managed by the Department of Public Works. As a result, approximately 90 percent of the work performed by the Department of Public Works' Hydraulic Section is for the Public Utilities Commission.
- Management responsibility for compliance with clean water regulations is currently split between the Water Pollution Control Division, the Bureau of Environmental Regulation and Management, and the Planning Bureau. This risks unclear accountabilities.
- After 7.5 years, the Water Pollution Control Division is still not fully integrated into the Department culturally, or in terms of policies and procedures. For example, Water Pollution Control Division staff were not consulted about the decision to withdraw clean water projects from the Department's long-term capital improvement program, the Clean Water Master Planning process is being managed by other parts of the Department, and the division's payroll services are still managed by the Department of Public Works, an arrangement which is finally due to end in December of 2004. A cultural consequence of this is the number of management audit Phase I interviewees who described clean water functions as the Department's "orphan stepchild."

Current Division of Clean Water Functions

As noted above, the City's clean water functions are divided between the Public Utilities Commission and the Department of Public Works.

Public Utilities Commission

- The <u>Water Pollution Control Division</u> operates and maintains the clean water system's sewers, conveyance system, and treatment plants. This division also provides clean water engineering services, and is responsible for the Southeast Community Facility. The Water Pollution Control Division comprises 415.84 full-time equivalent (FTE) positions and a FY 2004-2005 operating budget of \$144,289,726.
- The <u>Pretreatment, Pollution Prevention and Storm Water Program</u> of the Bureau of Environmental Regulation and Management manages initiatives to prevent pollution, control the quality of storm water run-off, and ensure that pretreatment programs

limit certain pollutants from going into the sewer system, and enforces pretreatment permit compliance. This program comprises 32.50 FTE positions and a FY 2004-2005 operating budget of \$4,274,712.

- The <u>Southeast and Oceanside Water Pollution Control Plant Laboratories</u>, managed by the Water Quality Bureau, conduct wastewater laboratory analysis. The Southeast and Oceanside Water Pollution Control Plant Laboratories comprise 30.07 FTE positions and a FY 2004-2005 operating budget of \$2,762,152.
- The <u>Clean Water Master Planning process</u> is currently staffed by the General Manager's Office and the Infrastructure Division's Program Management Bureau. The Clean Water Master Planning function comprises 2.10 FTE positions at a FY 2004-2005 salary cost of up to \$309,247, inclusive of mandatory fringe benefits.²
- <u>Clean water regulatory compliance services</u> are provided by the Planning Bureau. This function comprises 2.00 FTE positions, of which the Budget Analyst recommends that 1.00 FTE be transferred to the new Clean Water Enterprise for clean water regulatory compliance services at a FY 2004-2005 salary cost of up to \$160,361, inclusive of mandatory fringe benefits.

Department of Public Works

• The <u>Hydraulic Section</u> of the Civil Engineering Division evaluates the sewers, and plans and designs sewer repairs and upgrades. The Hydraulic Section comprises 20.50 FTE positions and a FY 2004-2005 operating budget of \$2,330,641.³

• The <u>Bureau of Street and Sewer Repair</u> is responsible for performing the sewer repairs and replacements paid for by Public Utilities Commission work order. The Bureau of Street and Sewer Repair dedicates a sewer team and a asphalt patch crew consisting of 35.50 FTE positions to this work order which in FY 2004-2005 is funded at \$7,744,699. In FY 2004-2005, the Department of Public Works is also receiving a Public Utilities Commission work order for the first time since the 1980s for street cleaning related to keeping debris out of the sewer system. This work order is in the amount of \$3,000,000 in FY 2004-2005.

¹ These laboratories also perform some drinking water laboratory analysis. There is also a laboratory located on Treasure Island which performs clean water laboratory services and which is currently staffed by a 0.50 FTE laboratory position. This separate facility may not continue to operate in the future since the workload could be easily handled by the Southeast and Oceanside Water Pollution Control Plant Laboratories.

² In addition, there will be three sets of staff working on specific aspects of the Clean Water Master Plan managed under a "matrix organization" whereby each staff member will report to both the supervisor in his or her own section and to the Clean Water Master Plan project manager. Engineering and plan checker staff will work on the Planning and Engineering Project. Coordinators of citizens' involvement and public information officers will work on the Public Participation Project. Planners will work on the Environmental Review Project.

³ The amount of \$2,330,641 comprises (a) \$1,730,641 for personnel costs, and (b) \$600,000 for a spot sewer repair contract.

• The <u>Bureaus of Architecture</u>, <u>Engineering</u>, and <u>Construction Management</u> provide specific clean water capital project related work under work orders from the Public Utilities Commission. Whereas the Bureau of Street and Sewer Repair focuses on smaller scale roadway and sewer projects, the Bureau of Engineering's Streets and Highways Division and Project Management Division are responsible for managing the contracts for large scale roadway and sewer projects.

Potential Consolidation of Clean Water Functions

The above clean water functions could be consolidated into a new Clean Water Enterprise within the Public Utilities Commission. The following section considers the advantages and disadvantages of consolidating six different clean water functions into a new Clean Water Enterprise. Phase IV of the Budget Analyst's management audit will consider the advantages and disadvantages of decentralizing business services currently managed by the Business Services Division to a new Clean Water Enterprise.

Public Utilities Commission

Water Pollution Control Division

| Restructuring Advantages | Restructuring Disadvantages | |
|---|---|--|
| The Water Pollution Control Division would be | None because the Water Pollution Control | |
| the nucleus of the Department's current clean | Division would be the essential core of the | |
| water operations, maintenance, and planning | Clean Water Enterprise. | |
| functions. | _ | |

Conclusion

The Water Pollution Control Division would be the essential core of a new Clean Water Enterprise. Instead of reporting to the Assistant General Manager, Operations, the Water Pollution Control Division Manager should report to the new Assistant General Manager, Clean Water.

Pretreatment, Pollution Prevention and Storm Water Program

| Restructuring Advantages | Restructuring Disadvantages |
|---|--|
| This program focuses completely on clean water regulations and standards. As the "Industrial Waste Group," the pretreatment function was previously part of the Clean Water Program. There would be significant staff support for the intent of this restructuring because this function would provide an important service to the Clean Water Enterprise. | Separating the Pretreatment, Pollution Prevention and Storm Water Program from the rest of the Bureau of Environmental Regulation and Management would break up an interdisciplinary organization which also comprises environmental compliance and health and safety. This interdisciplinary approach can respond rapidly to issues requiring an interdisciplinary response, such as the West Nile Virus prevention efforts at Lake Merced and mercury reduction efforts. Future interdisciplinary initiatives would require coordination across organizational boundaries. |
| Would facilitate executive management team decision-making with regard to pretreatment, pollution prevention, and storm water initiatives. | The Bureau of Environmental Regulation and Management, which staff indicate is working successfully, would be dismantled because after the Pretreatment, Pollution Prevention and Storm Water Program is removed, the remaining functions do not justify retention of a separate Bureau of Environmental Regulation and Management. Programs managed by the current bureau have received national awards. |
| Transfer into a new Clean Water Enterprise would reflect the symbiotic relationship that already exists between the Water Pollution Control Division, the Southeast and Oceanside Water Pollution Control Plant Laboratories, and the Pretreatment, Pollution Prevention and Storm Water Program. Pretreatment, Pollution Prevention and Storm Water Program staff members would have greater input into the Clean Water Master Plan which will determine the concepts to be implemented over the next 30 years by the Clean Water Enterprise. | The program's independence as a third party monitor of biosolids and organics in the wastewater treated by the Water Pollution Control Division could be reduced if the program was not kept separate from Operations within the Clean Water Enterprise's organizational structure. |
| A closer alignment between the Water Pollution Control Division, the Pretreatment, Pollution Prevention and Storm Water Program, and the Southeast and Oceanside Water Pollution Control Plant Laboratories should result in more efficient wastewater sampling and regulatory compliance monitoring. | |

The advantages of restructuring the Pretreatment, Pollution Prevention and Storm Water Program into a new Clean Water Enterprise outweigh the disadvantages, primarily because of that program's total focus on clean water and its close working relationship with other clean water staff.

Since the Pretreatment, Pollution Prevention and Storm Water Program represents approximately 71.2 percent of the Bureau of Environmental Regulation and Management's total technical staffing of 45.16 positions, the program would warrant the transfer to the Public Utilities Commission of a proportionate share of the five administrative and clerical support staff funded by the PUC Operating Fund, 4 or 3.50 FTE positions, for a total of 36.00 FTE positions.

Southeast and Oceanside Water Pollution Control Plant Laboratories

| Restructuring Advantages | Restructuring Disadvantages | |
|---|---|--|
| Placing the management of the Southeast and Oceanside Water Pollution Control Plant Laboratories under the Clean Water Enterprise would facilitate the chemists' involvement in wastewater treatment and the laboratory analysis which supports wastewater treatment. | Laboratory testing should not be under the control of operations which is producing the effluent being monitored. Third party testing and reporting prevents fraud. As part of the Water Quality Bureau, the laboratories have a barrier to conflicts of interest which might otherwise arise. However, independence could be assured by maintaining the laboratories as a separate bureau within the Clean Water Enterprise. There is no industry standard or regulatory requirement for separation. | |
| More than 50 percent of the work performed by the Southeast and Oceanside Water Pollution Control Plant Laboratories comes from the Bureau of Environmental Regulation and Management. | The Performance Assessment Phase I: Revised Draft Interim Report (June 11, 2004) prepared by Red Oak Consulting supported the continued integration of the drinking water and wastewater laboratories. | |

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This excludes the Classification 5125 Bureau Manager position in the Bureau of Environmental Regulation and Monitoring which might not be necessary if the Pretreatment, Pollution Prevention and Storm water Program, which is the largest portion of the Bureau of Environmental Regulation and Monitoring, is transferred to the new Clean Water Enterprise. The remaining Bureau of Environmental Regulation and Monitoring functions would be environmental compliance and the Health and Safety Program, both of which could be transferred to PUC Administration. The Budget Analyst will review the optimal location for these remaining functions and the need for the Classification 5125 Bureau Manager position in Phase IV of the management audit.

| Restructuring Advantages continued | Restructuring Disadvantages continued | | |
|--|--|--|--|
| The structural reintegration of the Southeast and Oceanside Water Pollution Control Plant Laboratories into the Clean Water Enterprise would reflect the continued workload, administrative, cultural, and physical colocation links the Southeast and Oceanside Water Pollution Control Plant Laboratories have maintained with the clean water system. Staff would feel greater cohesiveness with their major client which would lead to greater job satisfaction. Some staff believe that reintegration with the clean water system would make better use of their long-term knowledge about the clean water system, and would facilitate a more responsive information exchange between clean water operations and the Southeast and Oceanside Water Pollution Control Plant Laboratories. | The Water Quality Bureau has reorganized the laboratories by discipline (for example, inorganic, organic, and bacteriology) rather than by client (drinking water and wastewater). This allows staff to analyze both drinking water and wastewater samples which may result in improved staffing coverage, better utilization of staff, increased cross-training, productivity gains, enhanced customer service, and greater ability to respond to special requests and emergencies. The new structure should also prevents duplication of similar kinds of testing between laboratories. Disaggregation of the laboratories risks losing such benefits. The Budget Analyst notes that the consolidation of trace metals and microbiological testing could remain intact, with the respective labs contracting with each other for those services. However, this would rely on potentially extensive use of work orders. | | |
| Efficiency improvements are hindered by the laboratories' dispersed locations. | It may be more cost-effective to consider the Department's future laboratory infrastructure needs in terms of one site, rather than the current dispersed locations. | | |
| Restructuring may reduce the need for senior Water Quality Bureau positions. | The industry model in like organizations is combined laboratories. For example, East Bay Municipal Utility District, the Washington D.C. Suburban Sanitary Commission, and Seattle Public Utilities all have combined laboratories. | | |
| | While there has been some union resistance and issues related to pay differentials, there have also been personnel transfers and collaborations between the drinking water and wastewater laboratories. | | |

| Restructuring Advantages continued | Restructuring Disadvantages continued | |
|------------------------------------|--|--|
| | One Quality Assurance Officer oversees all the | |
| | laboratories, in place of the former two | |
| | independent officers, which has resulted in | |
| | standardized policies and procedures. There is | |
| | now one Laboratory Information Management | |
| | System (LIMS) instead of the former two | |
| | separate systems. One Client Services | |
| | Manager position, when filled, will provide | |
| | "one-stop shopping" services for water and | |
| | wastewater clients. The Budget Analyst notes | |
| | that such coordinated services could continue | |
| | to be provided even if the laboratories are | |
| | disaggregated, by means of contractual | |
| | agreements or work orders between the | |
| | laboratories. | |

The Budget Analyst does not recommend an organizational transfer for the Southeast and Oceanside Water Pollution Control Plant Laboratories at this time. The Budget Analyst will further review the optimal placement of the Water Quality Bureau Laboratories during management audit Phase III which will consider the Water Quality Bureau in its entirety. In terms of clean water functions, Phase III of the management audit will also examine the ten marine biology positions in the Water Quality Bureau's Environmental Services Section which undertake marine and San Francisco Bay monitoring related to wastewater discharges and bioassay testing of effluents.

The Southeast and Oceanside Water Pollution Control Plant Laboratories represent approximately 22.9 percent of the Water Quality Bureau's total technical staffing of 131.26 FTE positions. Therefore, if those laboratories were transferred to a new Clean Water Enterprise, they would warrant the transfer to the Public Utilities Commission of a proportionate share of the Water Quality Bureau's eight administrative and clerical support staff funded by the PUC Operating Fund,⁵ or 2.00 FTE positions, for a total of 32.07 FTE positions.

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⁵ This excludes the Classification 5133 Director of Laboratories position which might not be necessary if the laboratories are separated back into their former wastewater and drinking water functions and transferred to a new Clean Water Enterprise and a new Water Enterprise respectively. The Budget Analyst will review the need for the Classification 5133 Director of Laboratories position in Phase III of the management audit.

<u>Clean Water Master Planning and Planning Bureau Clean Water Regulatory Compliance</u> Staff

| Restructuring Advantages | Restructuring Disadvantages | | |
|---|--|--|--|
| The Clean Water Enterprise would have its own policy, planning, and regulatory compliance resources to manage the Clean Water Master Planning process, to comply with the Federal and State clean water permits, and to support the Assistant General Manager, Clean Water's advocacy role at the executive management team. | Centralized clean water planning would require extra coordination efforts with the other parts of the Department which have planning and capital improvement program responsibilities. | | |
| These policy and planning staff would be structurally integrated with the engineering and operations staff necessary to vet any Clean Water Master Planning proposals, and could work closely with expert consultants hired by the Clean Water Enterprise. | | | |
| Restructuring would achieve the recommendation made in <i>Draft Interim Phase II Report</i> on the Water Pollution Control Division prepared by Red Oak Consulting (August 10, 2004) that the Water Pollution Control Division should "have a strong leadership role in wastewater planning and in all decisions that impact the Clean Water Enterprise." | | | |
| These policy and planning staff would provide the Clean Water Enterprise with an important link to the Department's central policy coordination function. | | | |

Conclusion

The advantages of restructuring the Clean Water Master Planning and Planning Bureau Clean Water Regulatory Compliance staff into a new Clean Water Enterprise outweigh the disadvantages because of the need to coordinate important clean water planning efforts.

During the remainder of the management audit, the Budget Analyst will be considering the optimal relationship between planning staff located within the enterprises and any policy and planning coordination function that should continue on a centralized basis.

The clean water regulatory compliance function within the Planning Bureau is currently staffed by a filled 1.00 FTE Classification 0932 Manager IV position and a vacant 1.00 FTE Classification 5620 Regulatory Specialist position. The latter position is not

required because the clean water regulatory compliance role can be adequately performed by one senior position as is the case in the East Bay Municipal Utility District. The Budget Analyst recommends that the vacant 1.00 FTE Classification 5620 Regulatory Specialist, Clean Water Regulatory Compliance position in the Planning Bureau be eliminated.

Department of Public Works

Hydraulic Section

| Restructuring Advantages | Restructuring Disadvantages | |
|---|--|--|
| Approximately 90 percent of the Hydraulic Section's workload is related to Public Utilities Commission work orders. Hydraulic engineering is an appropriate function for the Public Utilities Commission. Its current location within the Department of Public Works is a legacy of a former organizational structure. | The Department of Public Works has primary responsibility for the right-of-way, and sewer-related work significantly impacts the right-of-way. Transferring the hydraulic engineering function to the Public Utilities Commission could increase coordination issues which, if not successfully managed, could result in schedule delays and cost increases for combined roadway and sewer projects. This poses a particular problem when the roadway portion of a project is more expensive than the sewer portion. | |
| Restructuring would increase the new Clean Water Enterprise's management control over, coordination of, and communication about sewer repair program planning. It would strengthen the Public Utilities Commission's capacity to plan and prioritize long-term sewer repair and replacement in relation to the Department of Public Works' repaving program. This would be a particular advantage when the sewer portion of a project is more expensive than the roadway portion. | Due to the loss of direct labor, the overhead rate for the Department of Public Works' Bureaus of Architecture, Engineering, and Construction Management would increase by an estimated 5 percent, from 168 percent to 173 percent. Redistribution of the Department of Public Works' overhead expenditures would increase the burden to the General Fund by an estimated \$98,900. These full cost impacts would occur only if the Department of Public Works makes no reductions to its administrative overhead expenses. However, this reduction in administrative overhead should be made to correspond with the transfer of operating responsibilities. | |
| Restructuring would increase the engineering capacity of the Water Pollution Control Division. This organizational restructuring would eliminate an artificial boundary between two engineering groups split between two departments. | Restructuring could reduce internal coordination with, and cross-training between, the Department of Public Works engineers responsible for roadway, sewer, and catch basin design. | |

| Restructuring Advantages continued | Restructuring Disadvantages continued |
|------------------------------------|--|
| | The Public Utilities Commission would need to |
| | negotiate use of the Geographic Information |
| | System "Sewer Base Map" with the |
| | Department of Public Works. That system |
| | would need to remain in the Department of |
| | Public Works because its street, right-of-way, |
| | and easement information is used by other |
| | Department of Public Works bureaus. |

The advantages of restructuring the Department of Public Works' Hydraulic Section into a new Clean Water Enterprise outweigh the disadvantages primarily because 90 percent of that section's workload is related to clean water and paid for by clean water revenues. Nevertheless, the disadvantages of restructuring are serious and would need to be addressed through close program planning between the two departments and the information exchange strategies recommended in Section 8.

The General Manager and the Director of Public Works will need to negotiate the specific Hydraulic Section resources to be transferred to the Public Utilities Commission's new Clean Water Enterprise because approximately 10 percent of the Hydraulic Section's workload is not clean water related. The Department of Public Works will continue to need resources to perform that work, unless it chooses to work order the necessary services back from the Public Utilities Commission.

Bureau of Street and Sewer Repair

| Restructuring Advantages | Restructuring Disadvantages | |
|---|--|--|
| Transferring the 35.50 FTE positions responsible for sewer repair to the Public Utilities Commission would give Sewer Operations a continuum of responsibility for sewers from initial inspection through actual repair and replacement. This would promote coordination and long-term planning from the sewer perspective. | The Department of Public Works has primary responsibility for the right-of-way, and sewer-related work significantly impacts the right-of-way. Transferring the sewer repair function to the Public Utilities Commission could adversely affect the Department of Public Works' ability to manage right-of-way issues. | |
| | Reducing the 112.17 FTE positions in the Bureau of Street and Sewer Repair by 35.50 FTE positions, leaving a residual bureau of 76.67 FTE positions, would increase the Department of Public Works' overhead allocation as a percentage of its personnel base unless the department was able to make a commensurate reduction in its overhead costs. This could result in a negative impact on the General Fund. Transferal of some sewer repair staff to the Public Utilities Commission would reduce staffing flexibility in the residual Bureau of Street and Sewer Repair to cover employees on | |
| | leave or disability, or meet peak seasonal workload needs. | |

Conclusion

The advantages of restructuring the sewer repair functions performed by the Department of Public Works' Bureau of Street and Sewer Repairs into a new Clean Water Enterprise may not outweigh the disadvantages. Due to the combined sewer and storm water system, the sewers, catch basins, sidewalks, and roadways are integrally interrelated and, therefore, both the Public Utilities Commission and the Department of Public Works have a legitimate role to play with regard to sewers. Every sewer project involves roadway repair and potential sidewalk repair. Every pavement project involves sewer assessment and, possibly, repair. The need for roadway and sidewalk repair is often due to subsidence caused by aging sewers or the installation of new sewers. As a result, the two departments will always have to manage the problematic interface between the needs of the sewer system, with its average 80 year life span, which can extend to 200 years for storage and transportation boxes, and the street system, which has a 25 year repaying cycle. Given this disparity in the life spans of the two systems, managing the interface poses challenges, particularly when it is difficult to diagnose the origin of the problem. For example, is the problem caused by a clogged sewer (Public Utilities Commission responsibility) or a collapsed sewer (Department of Public Works responsibility) and

which organization, therefore, should pay to solve the problem? There are approximately eight to ten major combined sewer and repaying projects per year.

Due to the shorter life span of roadways in comparison with sewers, and the pronounced public interest in the physically more obvious benefits of roadway maintenance and repair, there is a strong argument for the performance of sewer repair and replacement work impacting the right-of-way to remain within the purview of the Department of Public Works. However, the Budget Analyst will comment on this more definitively once Phase III of the management audit has reviewed the interface between the Public Utilities Commission and the Bureau of Street and Sewer Repair in relation to water main repair and replacement within the right-of-way, and the possibility of greater coordination of the sewer and water main repair and replacement programs.

Advantages and Disadvantages of Consolidation

Based on the above conclusions, Table 9.1 summarizes the functions that a new Clean Water Enterprise could include.

Table 9.1

A Consolidated Clean Water Enterprise

| Function | Current No. of FTE Positions | FY 2004-2005 Operating Budget |
|---|---------------------------------------|-------------------------------------|
| Water Pollution Control Division | 415.84 | \$144,289,726 |
| Pretreatment, Pollution Prevention and Storm Water Program | 36.00 | \$4,274,712 |
| Southeast and Oceanside Water Pollution Control Plant Laboratories | 32.07 | \$2,762,152 |
| Clean Water Planning and Regulatory Compliance | 3.10 | \$469,608 |
| Hydraulic Section from the Department of Public Works | 20.50 | \$2,330,641 |
| TOTAL: | 507.51 | \$154,126,839 |

Source: Public Utilities Commission and Department of Public Works

Creating a new Clean Water Enterprise comprised of the above operating entities, managed by the Assistant General Manager, Clean Water position recommended in Section 10, would achieve the following:

- A unified business identity for clean water staff that is characterized by shared goals, shared long-term planning capacity, functional coordination, and efficiency. It would facilitate clean water staff members' input into the Clean Water Master Planning process, the product of which will determine the concepts that need to be implemented over the next 30 years by clean water operations and environmental monitoring staff.
- Improved decision-making among staff working on clean water issues, and clear accountability lines.
- Increased stature for the Clean Water Enterprise within the organization by assigning it management accountability and responsibility equal to that assigned to the other business enterprises, and by ensuring adequate representation and advocacy at the executive management team level.
- Implementation of the Commission's stated policy preference for the Public Utilities Commission to be structured organizationally into business enterprises.
- Remedies for a number of the deficiencies related to the disaggregated structure of clean water functions cited by the *Draft Interim Phase II Report* on the Water Pollution Control Division prepared by Red Oak Consulting (August 10, 2004).
- Congruence with the organizational structure of the most similar Bay Area public utility. The East Bay Municipal Utility District, which is responsible for both water and waste water services, organizationally groups together the following: wastewater treatment; wastewater plant operations and maintenance; engineering, design, and construction management for wastewater facilities; laboratory services; related environmental services; and related financial management and administrative support services.
- Personnel and efficiency gains should be achievable from restructuring functions under the Assistant General Manager, Clean Water. For example, like functions could be integrated, spans of management control could be resized appropriately, and administrative support staff could be rationalized by centralizing administration for all the components of the new Clean Water Enterprise.

There are, however, risks associated with consolidation of all clean water functions which would need to be carefully managed:

• The new Clean Water Enterprise might tend to operate as a stand-alone entity, relying on the executive management team as the Department's sole coordination point with the rest of the Department, when in fact its staff should be working with staff from the other enterprises and the central policy and planning coordination function to

prevent fragmented policy development and planning. For example, there are likely to be significant synergies between the Clean Water Master Plan and the Water System Capital Improvement Program which will need to be fostered. To ensure that the necessary coordination happens, the executive management team needs to develop interdepartmental protocols specifying when Clean Water Enterprise staff need to work with other parts of the Department. These protocols could include internal memorandums of understanding and interdepartmental working groups to deal with specific policy and procedure issues.

• Difficulty in allocating Business Services Division staff support. During the course of the management audit, the Budget Analyst will be considering the recommendation made by Red Oak Consulting in its *Performance Assessment Phase I: Revised Draft Interim Report* (June 11, 2004) to:

"implement a matrix organization for support personnel where staff from purchasing, personnel, finance, and related support departments who are paid out of [clean water] funds are directly accountable to both the department for which they work and the [Clean Water Enterprise] which funds their position."

Under this model, Business Services Division purchasing, personnel, finance, information technology, and related support staff would be dedicated to the Clean Water Enterprise and co-located on site, thereby providing Clean Water Enterprise staff with direct access to Business Services Division staff who have a greater awareness of the enterprise departments' needs. While this theory has merit, the Budget Analyst notes that (a) dual reporting lines can create conflicts for both staff and managers, and (b) Water Pollution Control Division managers report a mixed experience with support staff decentralization.

Implementation

The Budget Analyst is cognizant that the Public Utilities Commission's recently appointed General Manager is actively looking at reorganizing the Department, with the ultimate goal of reorganizing the Department into its business lines. To achieve that, the General Manager has appointed new senior personnel, including a Deputy General Manager, to assist her to coordinate across the existing divisions on key issues. During this transition period, the General Manager does not support the flat organizational structure being recommended by the Budget Analyst, whereby an Assistant General Manager, Clean Water would report directly to the General Manager. However, the General Manager has indicated that she is prepared to examine a flatter management structure in the medium term. Therefore, if the Board of Supervisors approves the Budget Analyst's recommendations, the Budget Analyst would assess, in the medium term, the Department's progress towards the recommended organizational structure. While the Budget Analyst acknowledges that, in the short-term, the Department's budget will be accommodating senior personnel to manage the transition period, the Budget Analyst will be reviewing their justification in the medium term.

The structural disaggregation of clean water functions creates a number of deficiencies, most notably a lack of a unified business identity, inadequate advocacy at the executive management team, dispersal of functional responsibilities, and inadequate integration into the Public Utilities Commission as a whole.

Consolidation of the Water Pollution Control Division, the Pretreatment, Pollution Prevention and Storm Water Program, clean water planning staff, and the Department of Public Works' Hydraulic Section, and potentially the Southeast and Oceanside Water Pollution Control Plant Laboratories (subject to further review in Phase III of the management audit), could address these deficiencies.

The Public Utilities Commission and the Department of Public Works will always have to manage the problematic interface between the needs of the sewer system, with its average 80 year life span, and the street system's 25 year repaving cycle. Given this disparity in the life spans of roadways compared with sewers, and the pronounced public interest in the physically more obvious benefits of roadway maintenance and repair, there is a strong argument for the performance of sewer repair and replacement work impacting the right-of-way to remain within the purview of the Department of Public Works. However, the Budget Analyst will comment on this more definitively once Phase III of the management audit has reviewed the interface between the Public Utilities Commission and the Bureau of Street and Sewer Repair in relation to water main repair and replacement within the right-of-way, and the possibility of greater coordination of the sewer and water main repair and replacement programs.

Care will need to be taken to ensure that a new Clean Water Enterprise does not operate as a stand-alone entity when, in fact, it needs to be coordinating with the Department's other enterprises and its central policy and planning coordination function.

Recommendations

The Public Utilities Commission General Manager should:

- 9.1 Reassign management responsibility for the Water Pollution Control Division from the Assistant General Manager, Operations to the new Assistant General Manager, Clean Water position.
- 9.2 Reassign management responsibility for the Pretreatment, Pollution Prevention and Storm Water Program from the Manager, Bureau of Environmental Regulation and Management, to the new Assistant General Manager, Clean Water position.
- 9.3 Reassign management responsibility for the Clean Water Master Plan from the General Manager's Office and the Infrastructure Division to the new Assistant General Manager, Clean Water position.

- 9.4 Transfer the Classification 0932 Manager IV, Clean Water Regulatory Compliance position from the Planning Bureau to the new Clean Water Enterprise.
- 9.5 Eliminate the vacant Classification 5620 Regulatory Specialist, Clean Water Regulatory Compliance position in the Planning Bureau.
- 9.6 Assign management responsibility for the incoming Hydraulic Section to the Principal Engineer of the Water Pollution Control Division.
- 9.7 Direct the Assistant General Manager, Clean Water, as recommended in Section 10, to develop an optimal organizational structure to integrate like functions, create appropriate spans of management control, rationalize the administrative support positions, and manage the risks associated with the consolidation.
- 9.8 Direct the executive management team to develop intradepartmental protocols that ensure that the executive management team is not the sole policy and planning coordination point in the Department.

The Public Utilities Commission General Manager and the Director of Public Works should:

9.9 Negotiate the specific Hydraulic Section resources to be transferred to the Public Utilities Commission.

Costs and Benefits

The transfer of the Department of Public Works' Hydraulic Section to the Public Utilities Commission would incur the following costs or cost shifts:

- A transfer of \$2,330,641 in Hydraulic Section staff salaries and operating costs from the Department of Public Works to the Public Utilities Commission.
- Due to the loss of direct labor, the overhead rate for the Department of Public Works' Bureaus of Architecture, Engineering, and Construction Management would increase by an estimated 5 percent, from 168 percent to 173 percent. Redistribution of the Department of Public Works' overhead expenditures would increase the burden to the General Fund by an estimated \$98,900. These full cost impacts would occur only if the Department of Public Works makes no reductions to its administrative overhead expenses.
- Relocation costs if the Hydraulic Section staff were physically moved, or a shift in the lease costs between the two departments if the Hydraulic Section remained in its current accommodation.

All the other staffing changes would result in cost neutral transfers of salary dollars within the Public Utilities Commission's existing clean water personnel budget.

Elimination of the vacant Classification 5620 Regulatory Specialist, Clean Water Regulatory Compliance, position in the Planning Bureau would save between \$66,920 and \$81,354, plus mandatory fringe benefits, for a total savings of up to \$101,286 annually. Further salary savings may accrue from rationalizing administrative support positions.

Consolidation of clean water functions would foster a unified business identity for clean water staff characterized by shared goals, shared long-term planning capacity, functional coordination, and efficiency. It will improve decision-making among staff working on clean water issues, and ensure clear accountability lines. Therefore, the proposed structural changes would facilitate important cultural changes.