

The Authority to Manage Our Waste

SUMMARY

Humboldt Waste Management Authority (HWMA) provides a vital service, one that our community depends on to ensure safe, sanitary, efficient, and environmentally-sensitive disposal and recycling of household and industrial waste. The Humboldt County Civil Grand Jury (HCCGJ) has not investigated HWMA's operations since 2000. We decided to review Humboldt's waste management operations, particularly in view of the recent closure of the landfill east of Eureka.



Table Bluff dump site, circa 1970's

HWMA is responsible for providing efficient waste management for 80% of the solid waste of Humboldt County. Organized as a Joint Powers Authority (JPA) in 1999, HWMA manages the collection, removal, and disposal of solid waste as well as the recycling of materials on behalf of its member agencies. These include the cities of Arcata, Blue Lake, Eureka, Ferndale, and Rio Dell, with a Humboldt County Board of Supervisors (BOS) member representing its unincorporated areas, including Northern, Eastern and Southern Humboldt County. In addition to handling waste management, HWMA assumed responsibility for the closure, remediation and ongoing monitoring of the Cummings Road Landfill.

Our findings report an operation that is providing generally good service to its members and customers, with notably creative solutions and overall good operational management. The recent official closure of the Landfill represents an opportunity to refocus efforts on needed plant and equipment upgrades, and especially on gaps in longer-term planning. Past auditor reports have noted deficiencies in HWMA's profitability and financial reporting systems, although the past year's report showed considerable progress toward reduction of debt obligations as well as a return to operational profitability.



Cummings Road Landfill today

HCCGJ noted that Fortuna and Trinidad are not members of the JPA, and we investigated the extent to which this exclusion could be detrimental to the financial and environmental interest of members and non-members alike. We found that inefficiencies from HWMA's lack of being a true regional Authority detract from the county's waste and recycling management efforts.

BACKGROUND

Joint Powers Authorities (JPAs) have been widely used in California for more than 75 years, and are distinct from their member agencies in that a JPA is typically governed by its own board of directors. A well-run JPA can provide more efficient services by pooling the resources of member agencies, focusing on common solutions and avoiding duplication of effort.

HWMA was formed as a JPA in 1999, purchasing the assets, responsibilities and liabilities of its predecessor, the Humboldt County Waste Management Authority, with a combination of revenue bonds and loans. In 2000, it purchased the Hawthorne street facility from Eureka City Garbage, which included the use of the Cummings Road Landfill site. These assets were financed with a combination of trust funds, existing revenue stream, and short-term loans. Later, a grant/loan was obtained from the Headwaters Fund for clean-up of the Landfill.

The Landfill and its management was acquired from NorCal Waste Inc. in 2000, with HWMA receiving a trust fund of some \$7 million for the closure construction costs. Post-closure and mitigation of the site cost another \$6.5 million, requiring a state-mandated pledge of revenue. Further cleanup and mitigation costs associated with the resulting Cummings Burn Ash site were not planned and the Authority had to secure necessary funding from the Headwaters Fund to complete the project within the Cleanup and Abatement Order timeframe. The net result of these three items was an increase of the HWMA's overall debt.

HWMA manages approximately 70,000 tons of solid waste annually, in addition to running an integrated waste management program that includes facilities for greenwaste composting, household hazardous waste collection, a CRV buy-back program, recyclable materials drop-off, and several material-specific take-back programs.¹

In addition to overseeing the collection and disposal of approximately 80% of the volume of solid waste in Humboldt County, HWMA also has continuing responsibility for the remaining obligations inherited from the Cummings Road Landfill, including mandated maintenance and monitoring of the site for a period of 30 years from its 2015 closure. Dating from the 1930's, the former Landfill was an open-burning dump site for the greater Eureka area. Accumulated trash was set afire, and the resulting ash was simply pushed downslope. This practice of burning was stopped in the late 1960's, although a portion of the site continued to receive trash as a landfill into the 1970's. In the winter of 2005-2006, heavy rainfall caused slope failures in which significant amounts of the old burn ash were exposed and carried within the slide into the drainage areas downslope. The eventual remediation project, which required permitting approval from many agencies, finally resulted in the completion of corrective action in 2014. This project has consumed much of HWMA's time and resources since 2006, and resources continue to be stretched with respect to the ongoing monitoring and maintenance of the former Landfill site.

Because of the damaging environmental effects of uncontrolled dump and burn sites similar to the Cummings Road Landfill, the California legislature has progressively enacted laws and

¹ <https://archive.epa.gov/region9/organics/web/pdf/hwma-permitting-toolkit.pdf> Accessed January 6, 2017.

regulations, seeking to protect the environment, and more recently to minimize the volume of solid waste transported to designated and highly regulated landfills. Diversion of recyclable materials from solid waste has been the primary method of achieving this goal, and is a primary goal of HWMA, followed by diversion of greenwaste and, more recently, of food waste. Food waste accounts for 20-30% of the waste stream handled by HWMA, and is reported by management as a focus of future segregation efforts for composting, although a program attempted in 2012-2013 was not successful.

Recent legislation affecting waste management includes the policy goal from *California State Assembly Bill 341 (AB341)–Waste Diversion (2010)*² that not less than 75% of solid waste generated be source-reduced, recycled or composted by the year 2020. In a public online discussion, HWMA has indicated confidence that the Authority would achieve the 75% goal although staff has acknowledged that it will be a difficult challenge.

The isolation of Humboldt County from major urban centers further complicates how solid waste is managed in the region. Lacking a local landfill, solid waste must travel by truck over challenging roads to a licensed landfill. (HWMA now contracts for its waste to be hauled to the Potrero Hills site in Marin County.) While smaller landfills sites in Shasta County and in Oregon are available, the alternative of a new local landfill facility is currently not deemed to be feasible.

METHODOLOGY

The Grand Jury asked: Is HWMA a viable entity operationally and financially? Are its rates reasonable? Is the greatest possible amount of our waste being diverted or recycled? Is disposal of non-recyclables being done with the least ecologically damaging results?

The HCCGJ gathered information from a variety of sources:

- Interviews with management and staff of HWMA
- Interviews with HWMA Board Members
- Interview with a BOS member
- Meeting agendas and minutes from August 2016 thru March 2017
- Financial Statements and Auditor Reports from August 2016 thru February 2017
- HWMA website postings, including Capital Equipment Plan
- “Permitting Tool Kit for Food Waste Anaerobic Digesters,” Prepared by HWMA, March 2013³
- “Sea Level Rise,” Adaptation Planning Report Addendum No.1,” City of Eureka, Dec. 15, 2016⁴

² http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0301-0350/ab_341_bill_20111006_chaptered.html
Accessed May 17, 2017.

³ <http://www.hwma.net/sites/default/files/HWMAPermittingToolkit.pdf> Accessed May 17, 2017.

⁴ http://www.eureka2040gpu.com/Links/pdfs/Eureka%20Adaptation%20Plan%20Addendum_Final_161230.pdf
Accessed May 17, 2017.

DISCUSSION

HWMA is largely meeting the challenges of normal operations and continuing obligations from the Cummings Road Landfill with ingenuity and creative thinking. Examples of creative services include free-to-the-customer appliance recycling, free mattress recycling (with a recycling fee built into the purchase by law), and free hazardous waste drop-off. Besides the CRV buy-back program, the Hawthorne street recycling center offers friendly and efficient availability for self-service. Self-haul is available, and reasonably priced disposal of greenwaste is provided. Commercial rates (i.e., rates that are charged to HWMA's contractors) provide the basis for end-customer rates, and are the lowest in the area.

The Grand Jury observes that several challenging areas need attention. HWMA's ability to maintain competitive rates for its services, while providing for increasing volume and for expected environmental impacts, require the dedication of its staff and active leadership of its Board.

Three Major Areas of Concern

1. Operational Challenges

- Management reports that the volume of both solid waste and recyclables is notably increasing, with recycling expanding fivefold in the past three years as small operators have exited a **severely declining commodities market for recycled materials**.
- HWMA is a CRV Buyback Center, reimbursed by the state for refunds. While this is in theory a revenue neutral operation, a non-reimbursed CRV center staff person has been added in each of the past three years to handle the **increased volume**.
- Although Humboldt County has better-than-average compliance, with customer separation of recyclables (60-80%), employees still must separate the remainder from the waste stream. In the past, non-CRV recyclables have been an important source of revenue, but markets for many materials have nearly collapsed in the past several years, and transportation costs take much of the profit from those still in demand. **HWMA is currently losing money on its non-CRV recycling operations.**
- Lack of space at the Hawthorne site is a factor affecting safety and efficiency. Inadequate space for diversion activity, storage, and separation of recyclables and food waste is a **limiting factor in expanding services, and in meeting the state mandated diversion goal**, as well as maintaining safe working conditions.
- Hazardous waste volume is increasing, and its **disposal is costly**. Butane cans are an increasing menace, and marijuana legalization is expected to increase waste materials requiring special handling. Even as methods for composting are sought, food waste, which produces methane, requires special processing. HWMA manages these hazards as part of its service to the community.
- HWMA's **current recycling equipment is reportedly inadequate for large scale operation**, resulting in loss of potential revenue from resales of usable materials. Arcata (an HWMA member) recently decided not to take its recycling to HWMA. A city official commented that the Arcata City Council made that decision because

they thought more materials could be reclaimed, and that “Zero Waste of Humboldt wanted to move away into something more local.” However, Arcata’s hazardous waste is all handled by HWMA.

- Illegal dumping is a County-wide issue. HWMA management is consciously aware that maintaining an affordable fee structure for customers impacts illegal dumping. Moreover, its mattress recycling program (free to customers) and its appliance “free-recycling” program are services designed to have a positive effect in **detering illegal dumping**.
- HWMA’s **arrangements for transport and disposal are complex**. The Authority manages three existing disposal and associated transport contracts: one transport contract just renewed with Bettendorf Trucking for one year, one for disposal with Dry Creek Landfill in southern Oregon, and a ten-year transport and disposal contract with Solid Waste of Willits (SWOW), of which eight years remain.
- HWMA operational management agrees that the Authority could provide more services, streamline its operation, and reduce member costs by becoming an **all-county regional authority**. Staff maintains that shared space and equipment resources, economies of scale, and coordinated transportation costs could save up to 15% in expenses for both HWMA and the communities who choose to join. Regional operation could ultimately lower the cost to ratepayers as well as decreasing the environmental impact of current inefficient hauling.

A number of factors appear to be impeding the development of a regional authority. Among them are:

- As noted, Fortuna and Trinidad are not part of the JPA, and have separate contracts with Eel River Disposal and Humboldt Sanitation, respectively. Contractual obligations, as well as realigning overall use of disposal options, would require adjustment and management cooperation.
- In the case of Fortuna, long-standing animosities and distrust have plagued cooperation, mainly stemming from HWMA’s assumption of the responsibility for the Landfill closure. Fortuna’s city managers at the time did not agree to assume this responsibility. Although HWMA and Fortuna have recently cooperated in the handling of hazardous waste, and have jointly participated in public recycling events, there have been no recent overtures by either party for Fortuna’s inclusion in the HWMA.
- Current major concerns are the financial difficulties of Solid Waste of Willits (SWOW), the contractor who has been providing transportation to the Potrero Hills site in Marin County. SWOW has recently appealed for relief from Mendocino County following its president’s prediction of its “imminent financial collapse.” A review of the situation by the Mendocino Board of Supervisors concluded that SWOW’s losses stemmed primarily from its operations in Humboldt County. Whether SWOW will fail or resort to an unfavorable renegotiation of rates is not clear. Either result would be potentially significant to HWMA’S operation. As of 11/1/2016, SWOW has been transporting 100% of HWMA’s solid waste to the Potrero Hills Landfill.

2. Financial Management and Reporting: Observations and Concerns

A long-term deficit operation has existed since at least fiscal year 2010-2011. While the 2015-2016 results indicate a turning point in operational deficits, HWMA's financial viability clearly depends on stable hauling and landfill costs, efficient operations at Hawthorne, and achieving at least a revenue-neutral recycling operation.

- Audits since 2008 have cited recurrent reporting deficiencies. The lack of an integrated financial reporting system contributes to the lack of clarity of financial reports.
- For the fiscal year ending June 30, 2016, HWMA reported a net operating income of \$1,172,432 (a significant improvement from their loss of \$539,386 in 2015). Management attributed the turnaround to a refinance of outstanding debt, and to an increase in fee income from improved participation by satellite facilities, as well as to "improved recordkeeping." Operational expenses increased, but were offset by expense reductions from the completion of the Cummings Road burn ash site remediation.
- A Negative Net Position of -\$4.8 million on June 30, 2016 can be compared to -\$8.0 million for the previous year. According to staff, the improvement resulted from cost saving efforts, as well as lower costs for continued monitoring and maintenance of the Cummings Road Landfill. However, financial reports do not clearly identify specifics of Restricted Funds, Deferred Inflows, and Deferred Outflows. The calculation of Net Position is not supported by sufficient detail to be meaningful to the reader.
- Financial reports do not clearly identify and separate waste management operations from Cummings Road obligations. Clearly delineating the reporting of operational income and expenses from the Cummings Road project would give a more accurate assessment of operational efficiencies, and reveal the true costs of Cummings Road. For example, staff time spent on the latter is not broken out independently of overall Hawthorne operations.
- Hardware and software tools needed to track and report operations have not been regularly maintained. Following an October 2016 computer crash affecting vendor payment processing and monthly financial reporting, the Authority stated there were server capability improvements. It reported a January 2017 upgrade of its 2004 Great Plains software.
- Recent audits state that staff does not have the expertise or knowledge to properly prepare full disclosure financial statements, nor to identify significant and necessary adjustments. Despite several years of acknowledging the problem, financial management staff has not completed training in the specifics of its accounting system, and had not completed training for the anticipated software upgrade prior to its installation.

3. Planning Issues

HWMA lacks urgently needed planning in the areas of:

- **Back-up options for contractors and disposal availability**
HWMA needs an operational/financial plan to deal with the short-term loss or renegotiation of contracts for hauling and disposal options.

- **Budget development for forecasting and performance measurement**
The forward projection of revenues and expenses (including cost estimates and timelines of projects planned for the next several years) needs more attention as a critical tool for focus on longer-term objectives.
- **Lack of space at its Hawthorne facility**
Lack of space at the Hawthorne site is a factor affecting safety and efficiency. Inadequate space for diversion activity, storage and separation of recyclables and food waste is a limiting factor in reaching the mandated diversion target, as well as expanding services. It also creates a challenge to maintaining safe working conditions.
- **Medium to long-term viability of the Hawthorne facility**
HWMA needs to develop and prioritize options for dealing with the observed rising water table threatening its Hawthorne location. The present water table as reported by HWMA management is 19 inches below the surface. Although there is a significant range of sea-level rise projections for the Humboldt Bay Region, most predictions are of a 3 to 6 foot rise by the end of this century. The Authority cannot reasonably continue to postpone dealing with this vital concern.
- **A clearly communicated disaster plan**
A plan for how operations would be affected following a major flood, earthquake or landslide—particularly dealing with how solid waste would be handled until transported to available landfills—must be communicated to employees and other stakeholders well before an occurrence.
- **Long-term planning for increasing overall waste volume**
HWMA has demonstrated forward thinking in planning for overall waste volume, particularly with the problem of dealing with food waste. In 2013, HWMA released a “Permitting Tool Kit for a Regional Food Waste Digester,”⁵ based on an HWMA feasibility study titled “Food Waste Diversion and Utilization in Humboldt County”

The goal was removing food waste from the waste stream and converting it into renewable energy and fertilizer. Even though this project had specific difficulties that were beyond the scope of the Authority’s powers to resolve, the innovative thinking that went into it proves that HWMA has already applied creative thinking to solve some of our waste management problems in Humboldt County.

Currently, modern incineration methods have evolved as a much-improved method for converting waste with near-to-negligible emissions. They are in wide use in Europe, and are in operation in over 300 U.S. communities. Incineration offers the conversion of waste into clean energy, producing and lowering the costs of electricity. A feasibility study and evaluation would be a first step in determining if this option could be a remedy to the inefficiencies and negative environmental impacts of hauling waste to distant landfills.

⁵ <https://archive.epa.gov/region9/organics/web/pdf/hwma-permitting-toolkit.pdf>. Accessed May 17, 2017

FINDINGS

- F1. HWMA is caught in the middle of growing pressures to deal with an increasing volume of waste, a shrinking market for recycled materials, and a 30-year commitment to continue monitoring and cleanup of the closed Cummings Road Landfill site.
- F2. Serious financial issues include a persistent deficit in operations (until fiscal year 2016-2017), and unclear financial statements regarding HWMA's net worth position.
- F3. HWMA lacks an integrated financial reporting system, and provides inadequate training for personnel who are responsible for the reporting.
- F4. A severe shortage of space for operations at the Hawthorne facility limits the Authority's ability to divert recyclables from the waste stream and to deal with food waste.
- F5. On a yearly basis, approximately 70,000 tons of waste is transported to recycling sites and landfills (including Potrero Hills, a 550-mile round trip) by diesel-burning trucks.
- F6. HWMA is not operating as a regional entity, foregoing the opportunity for shared resources, economies of scale, and more efficient (and eco-friendly) trucking transportation.
- F7. HWMA lacks operational disaster planning, and is not developing viable options to deal with forecasted rising groundwater levels.

RECOMMENDATIONS

- R1. The Humboldt County Civil Grand Jury recommends that the HWMA Board must give immediate attention to improved financial accounting and reporting, and must ensure that up-to-date systems are available and maintained by adequately trained staff. **(F2, F3)**
- R2. The Humboldt County Civil Grand Jury recommends that the financial management staff clearly separate accounting for activities involving Hawthorne operations from continuing obligations for the Cummings Road Landfill. **(F2)**
- R3. The Humboldt County Civil Grand Jury recommends that a rolling multi-year forecast for revenues and expenses, including best estimates for planned projects, be required annually and used as a basis for facility planning. **(F3)**
- R4. The Humboldt County Civil Grand Jury recommends that, given its current lack of storage and on-site recycling capability, HWMA staff perform a cost analysis for contracting out its recycling versus acquiring more space for this purpose. **(F1, F4)**
- R5. The Humboldt County Civil Grand Jury recommends that the HWMA carefully analyze whether operating as a regional authority that includes all of Humboldt County would be more cost effective for ratepayers, while decreasing the environmental impact of current inefficient hauling. Our County Board of Supervisors (BOS) should take an active leadership role in promoting HWMA as a regional authority by encouraging the membership of Fortuna and Trinidad. **(F1, F6)**
- R6. The Humboldt County Civil Grand Jury recommends that the HWMA Board and staff create, prioritize and regularly review an HWMA mid to long-term plan, projecting expected waste volume increases and ensuring adequate facilities for waste management and for recycling. The plan must project and recommend mitigation of the effects of the rising water table, as well as deal with operations following natural disasters. **(F1, F7)**

R7. The Humboldt County Civil Grand Jury recommends that the HWMA obtain support of the Board of Supervisors to conduct a feasibility study for the use of modern incineration methods to deal with solid waste. (F5)

REQUIRED RESPONSES

Pursuant to Penal code section 933.05, the Humboldt County Civil Grand Jury requires responses as follows:

- Humboldt Waste Management Authority Board of Directors (R1, R2, R3, R4, R5, R6, R7)
- Humboldt County Board of Supervisors (R5, R7)

REQUESTED RESPONSES

- Fortuna City Manager (R5)
- Trinidad City Manager (R5)

Reports issued by the Grand Jury do not identify individuals interviewed. Penal Code section 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Grand Jury.