

Proposed Components of an Integrated Wastewater Master Plan

Vision Statement –

Aspirational: No contaminated water is discharged to the environment.

DEM practices sustainable wastewater resource management on Hawaii Island.
[jurisdiction solely for operation and maintenance of county-owned sewer systems]

Ramzi 4/27/22: to convert materials recovery from solid waste and wastewater into energy and agricultural sustainability

Guiding Principles -

1. Apply Life Cycle Assessment principles to minimize adverse impacts to health, safety, and financial security short and long term for all affected stakeholders and the environment. “Sustainable”
2. Think water resource management vs wastewater management. Preserve water resources through reduction of use, reuse and recovery of treatment byproducts.
3. Affordable and reliable (don’t over-engineer)
4. Sustainable for communities and expected growth
5. Flexible to new technologies
6. Continuous improvement toward vision
7. Work with public and private entities to achieve goals.

*Ramzi 4/27/22: Our mission is to provide a **responsible, comprehensive, safe and efficient** management of wastewater and solid waste resources by building and replacing the dilapidated facilities with **the new technologies** that maximizes water **reclamation** and put it back to use gas generation, biosolids and green waste composting.*

Strategies

- I. Assessment of Planning Areas
 - a) Local Physical Environment (and expected climate change pressures)
 - b) Population Trends, including tourism
 - c) State of Current Integration (jurisdiction and actual management)
- II. Assessment of Existing Facilities *Current* and *Projected* Ability to Meet Demographic Needs

- a) Capacity Information and Condition Assessment
- b) Financial Health
- c) Regulatory Compliance

III. Alternatives for Collection and Treatment Systems - Evaluation by district/region

IV. Improvement Plans - facility-specific plans and how they contribute to the vision and incorporate guiding principles

- a) Current System Improvements/Repairs
- b) 5-Year Improvement Plans
- c) 10-Year Improvement Plans
- d) 15-Year Improvement Plans

IV. Financing and Funding Options

VI. Opportunities and Challenges

- a) Partnerships
- b) Legal and jurisdictional
- c) Social

VII. Conclusions and Recommendations

Appendices Projects Schedule (including public communication plan)

- Detailed facility and sewer line plans

Comparable County model for mass transit: <http://heleonmasterplan.com/wp-content/uploads/2018/08/180813-FINAL-FULL-REPORT-reduced.pdf>