



1 from the Wailuā River to Hanamā'ulu, over land owned by  
2 Visionary LLC and the department of Hawaiian home lands.  
3 The county initiated negotiations with the property owners  
4 to use the road when Kūhi'ō Highway is closed as a result of  
5 traffic accidents, and has maintained the road at its own  
6 cost since about 2004. However, the road must be upgraded  
7 to accommodate long-term use. Since the State has no  
8 immediate plans to widen Kūhi'ō Highway or create alternate  
9 routes, there is an urgent need to make further  
10 improvements to the emergency bypass road so the largest  
11 population center on Kaua'i is not cut off from the county  
12 seat and the airport when Kūhi'ō Highway is closed.  
13 Resurfacing a twelve-foot wide road for one-lane and one-  
14 way traffic is necessary to address the deteriorated road  
15 surface and pavement structural failures and washouts. In  
16 addition, the request includes funds for safety  
17 improvements, such as guardrails, signage and delineators,  
18 as well as consultant services for the preparation of plans  
19 and specifications.

20  
21  
22 B. WAIMEA WASTEWATER TREATMENT PLANT UPGRADES \$6,000,000  
23

24 The Waimea wastewater treatment plant is an existing  
25 facility that serves the community of Waimea, Kaua'i,  
26 Hawaii. The Waimea wastewater treatment plant was  
27 originally constructed in the 1970s and has a capacity of  
28 three hundred thousand gallons per day, average daily flow.  
29 Presently, the plant is operating at approximately ninety  
30 per cent of its capacity, and the county is restricting new  
31 sewer service connections in the community due to the lack  
32 of available Waimea wastewater treatment plant capacity.

33  
34 Because the plant is operating near capacity, the county  
35 has proceeded with the planning and preliminary engineering  
36 for expansion. The first step was preparation of a  
37 "facilities plan". The facilities plan identifies a near-  
38 term need to double the existing capacity of the plant.  
39 The phase I project will therefore incorporate expansion to  
40 a capacity of approximately seven hundred thousand gallons  
41 per day, along with providing improvements to the plant's  
42 solids-handling facilities, upgrading the effluent to meet  
43 "R-1" standards for effluent re-use, and other improvements



1 to modernize and improve plant reliability and efficiency.  
2 Preliminary engineering for the expansion is underway,  
3 including the preparation of the environmental assessment.  
4 The draft environmental assessment was published in August  
5 2008.

6  
7 Expansion of the Waimea wastewater treatment plant will be  
8 completed within the existing facility's property, and is  
9 anticipated to include modification of the existing  
10 activated sludge treatment process to incorporate use of  
11 alternate treatment processes such as membrane or  
12 bioreactor design. The expansion will also upgrade the  
13 effluent water quality using ultraviolet disinfection to  
14 produce R-1 effluent to allow for enhanced opportunity for  
15 effluent reuse. The R-1 effluent will be suitable for a  
16 broader range of re-use opportunities, allowing it to be  
17 viewed as a water resource for the community.

18  
19 The phase I expansion will be designed to provide an  
20 average daily wastewater treatment capacity of  
21 approximately seven hundred thousand gallons per day. The  
22 capacity required is based on the population projection,  
23 including moderate additional development of property near  
24 Waimea, consistent with growth as anticipated in the  
25 county's general plan.

26  
27 At present, the county is limiting new connections to the  
28 county sewer system to one dwelling unit per existing lot  
29 of record through the building permit process. This  
30 limitation is a constraint on development of subdivisions  
31 or new housing in the community, at a time when there is  
32 significant island-wide lack of affordable housing.

33  
34 The county will also examine incorporating energy  
35 efficiency alternatives into this project such as  
36 constructed wetlands to create a more energy efficient  
37 facility in an effort to become less dependent on fossil  
38 fuel.

39  
40 The county requests support from the State for this project  
41 to include alternative energy initiatives; however, cost  
42 estimates were not included in the project cost.

43



# H.B. NO. 214

1 SECTION 3. This Act shall take effect on July 1, 2009.

2

INTRODUCED BY:

Calvin K. Ay

**BY REQUEST**

JAN 22 2009



**Report Title:**

General Obligation Bonds; Kaua'i Capital Improvement Projects

**Description:**

Appropriates \$6,950,000 in general obligation bonds to the county of Kaua'i for improvements to the Wailuā emergency bypass road and the Waimea wastewater treatment plant.

