



TRANSPORTATION AND PUBLIC WORKS COMMISSION INFORMATION REPORT

DATE: March 4, 2014

AGENDA OF: March 17, 2014

DEPARTMENT: Public Works

SUBJECT: Cowell Beach / Update

RECOMMENDATION: For Information Only

BACKGROUND: Cowell's Beach (Cowell's) is one of the most popular beaches in Santa Cruz; however, over the last several years it has frequently been posted as "unsafe" due to high bacteria concentrations in the near shore waters. There are a number of potential sources of the high bacterial concentrations at the beach.

It is difficult to determine what will improve Cowell's Beach. Improvements that may result in lowering bacteria levels at the beach are made as quickly as possible. The current work schedule and most recent improvements are as follows:

1. The gutter seep on Pacific that was "hot" has been diverting to sanitary sewer. Work was completed on October 8th.
2. The storm drain manhole at end of Bay Street has had some high bacterial levels although human markers were not found at that location. First upstream manhole is not accessible due to non-standard access lid. Will replace lid this winter to improve access and facilitate better inspection of system.
3. The County and Stanford University performed human marker testing at 10 locations throughout the summer and into the fall. Locations include Cowell's Beach, several manholes on Neary-to-Cowell's pipeline and several locations in Neary Lagoon. Test results showed human markers at Laurel Creek. Data needs further interpretation and additional upstream testing of Laurel Creek.
4. All permits have been received for installing a gate to shut off Neary Lagoon from the beach including Coastal, Fish and Game, and Army Corps of Engineers. The gates are ordered and will arrive in April and will be installed in April or May.

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Water quality data this summer at Cowell's Beach is mixed. Overall the test results used by the "Heal the Bay" annual "Beach Report Card" report are better than last year when the Cowell's Beach west of the wharf site was listed on the Report's "Beach Bummer List." As an example, single sample tests for enterococci exceed posting limits 8 of 23 (35%) tests taken last summer. This summer the limit has been exceeded 11 times of the 47 (23%) tests. The Beach Report uses a complicated system to rank beaches so it is impossible to tell if the Cowell's Beach west of the Wharf site will be off the "bummer" list but test results are better. Staff is hopeful that the high rating of first or second on the list will improve but the beach may still be in the top 10.

As this winter has been so dry, testing at the beach under dry condition has continued and has shown significant improvement since the summer ended. It is unclear why results improve in the winter.

Next summer with the gates installed (item 4 above) and the fix to the gutter seep (item 1 above) should result in even better water quality at the beach.

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