



Final Report

Clean Beaches Initiative 2004

City of Capitola

Agreement # 01-084-550-1

City of Capitola
Steven E. Jesberg
Public Works Director
(831) 475-7300
sjesberg@ci.capitola.ca.us

SWRCB
Connie Perkins
Division of Financial Assistance
(916) 341-5825
stevensc@swrcb.ca.gov

Table Of Contents

1.0	Background.....	1
2.0	Project Summary.....	2
3.0	Approach and Techniques Used During the Project.....	3
4.0	Task Results.....	5
5.0	Project Results.....	10
6.0	Task Deliverables.....	11
7.0	Future Projects.....	12
8.0	Notice of Completion.....	12

Attachments

Project Questionnaire
Village Drainage Improvement Plan
Photographs of Installed Bird-Proof Trash Cans

1.0 Background

Capitola Beach and the adjoining Soquel Creek and Lagoon have had a history of high fecal coliform counts resulting in permanent health warning postings of the lagoon and occasional posting of the beach itself. Bacterial contamination on Capitola Beach and Soquel Lagoon is largely attributed to urban runoff in the upper and lower watershed, leaky sewer lines and high numbers of gulls and pigeons around the Lagoon and beach. Sea gulls and pigeons are one main culprit as their droppings accumulate in the form of fecal coliform bacteria and on any given day there are hundreds of birds attracted to Soquel Lagoon.

Management plans and a 1999 task force recommended water quality improvement projects for the City of Capitola in Santa Cruz County. Planning and engineering for such projects had not yet been accomplished. In accordance with the Costa-Machado Water Act of 2000, funding of \$100,000 was appropriated to address beach and Lagoon water quality problems in Capitola, however projects were unspecified. The Clean Beaches Initiative grant of \$100,000 provided the City of Capitola the opportunity to prepare and implement a Capitola Village Drainage Improvement Plan, which identified and prioritized water quality improvement projects from five local agencies. Environmental documents were prepared for a high priority project, and gull proof trashcans were installed on the beach and waterfront.

2.0 Project Summary

The purpose of the project was to reduce periodic postings and closures at Capitola Beach. Because at least five different agencies are involved in water quality issues in Capitola, there was a need to coordinate work and identify and prioritize projects to ensure that projects are integrated and coordinated with other capital improvements planned for the City. This involved planning, engineering, and prioritizing improvements to storm and sanitary sewer systems in the areas of the Esplanade, downtown and up Noble Gulch. The top ten prioritized projects identified in the Village Drainage Improvement Plan are listed below in order of priority.

1. Esplanade Storm Drain Dry Weather Diversion
2. Sanitary Sewer Upgrades of Creekside Sewer System
3. Phase I Wetland Construction
4. Lateral Replacement Cost-Share Program
5. Phase II Wetlands Feasibility Studies and Designs
6. Storm drain Improvements between Stockton Avenue Bridge and Railroad Trestle
7. Noble Gulch Improvements
8. Upper Soquel Creek Outfall Improvements
9. Sanitary Sewer Improvements Along Eastern Bank of Soquel Creek Continued Implementation of the Soquel Creek Lagoon Management and Enhancement Plan

Environmental documents were not required for the first priority project nor the second highest priority project. An Initial Study and Mitigated Negative Declaration for the third priority project, a biofiltration wetland project, were completed on March 28, 2005. A follow-up application to the Clean Beaches Initiative will be submitted for construction funding in 2005.

The project also sought to reduce bacterial contamination by installing bird exclusion devices on rooftops and trashcans, and implementing pilot projects to reduce the amount of birds in the vicinity.

3.0 Approach and Techniques Used During the Project

The City of Capitola executed contracts with Kestrel Consulting, Inc. for project coordination and with Harris & Associates Engineers (Sycamore Associates subcontractors) to provide engineering services for the Village Drainage Improvement Plan and environmental documents. The City worked closely with other local agencies to develop the Plan and discuss priorities for implementation. Coordinating meetings were held with staff from the County Departments of Environmental Health and Public Works, Santa Cruz County Sanitation District, Santa Cruz County Resource Conservation District and Coastal Watershed Council. The City also shared information about Plan development on a regular basis with water quality managers at the Monterey Bay National Marine Sanctuary.

The Village Drainage Improvement Plan required development of drainage facility maps of the Village and along the entire eastern edge of Soquel Creek to the northerly city limit at State Highway 1. These maps consist of twelve sheets showing all drainage and sanitary sewer facilities in the area. These two systems are known to be the key infrastructure that could lead to elevated bacteria levels along the beach. City staff met with the local sanitation district personnel and County of Santa Cruz Environmental Health agency to review the maps and identify areas where water quality sampling results showed high levels of bacteria when compared to other nearby areas. For these areas, sources were identified and the list of potential projects developed. A draft of the Village Drainage Improvement Plan was circulated in November and reviewed by the following people:

Don Alley	Fisheries biologist
John Ricker	County Environmental Health
Chris Coburn	Monterey Bay National Marine Sanctuary
Rachel Lather	Santa Cruz County Sanitation District
Rachel Fatoohi	County Public Works Stormwater Manager
Karen Christensen	Santa Cruz County Resource Conservation District

There was a good consensus on the final prioritization of projects. Copies of the finalized Village Drainage Improvement Plan were distributed to local agencies that participated in plan development, as well as to Angela Carpenter at the Central Coast Regional Water Quality Control Board.

The project also included a task to install bird-proof trashcans on the beach and downtown, and design bird barriers for the roofs of waterfront buildings. In order to determine the best model of bird proof trash can for use in Capitola, we purchased several different types of trash can/ lid combinations early fall. The best design we found was found from one produced by Kay Park, Inc. These were selected for sturdiness, ease of

lifting, effectiveness against birds, and aesthetics. The City purchased 30 trash cans, trash can inserts and lids which are now in use on Capitola Beach and along the waterfront.

Our approach to getting bird barriers installed on waterfront restaurants was to develop outreach materials, gather contact information, and mail outreach packets to 12 waterfront businesses. There was no response to this outreach so we followed up with a second mailing and phone calls. There was no response to this effort either. We asked for additional outreach from key members of the City Council, however these elicited no response from businesses either. Steve Jesberg, project director, made personal visits to two establishments. While these businesses expressed interest, they are unwilling to commit to installing bird barriers at this time. Work on this effort will continue as the City implements its Coastal Non-point Source Pollution Control grant (Agreement # 03-184-553-0) which includes cost-share funding for the barriers, however we have been disappointed by the lack of response in the waterfront community. For the purposes of this Clean Beaches grant, we made the decision to re-program the remaining funds in this task toward the purchase of additional bird proof trashcans.

4.0 Task Results

Task 1 Project Management and Administration

- 1.1 Provide all technical and administrative services as needed for Agreement completion; monitor, supervise and review all work performed; and coordinate budgeting and scheduling to assure that the Agreement is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.
- 1.2 Ensure that the Agreement requirements are met through completion of quarterly progress reports and through regular communication with the SWRCB Project Representative. The progress reports shall describe activities undertaken and accomplishments of each task during the quarter, milestones achieved, and any problems encountered in the performance of the work under this Agreement. The description of activities and accomplishments of each task during the quarter shall be in sufficient detail to provide a basis for payment of invoices and shall be translated into percent of task work completed for the purpose of calculating invoice amounts.
- 1.3 The Contractor and any of its subcontractors shall notify the SWRCB Project Representative at least ten (10) working days prior to any public or media event publicizing the accomplishments and/or results of this Agreement and provide the opportunity for attendance and participation by SWRCB representatives.
- 1.4 Complete a one (1) page contract summary form (form to be provided by the SWRCB) within three (3) months of the Agreement contract execution.
- 1.5 Award contract(s) to appropriate subcontractors to perform tasks as outlined in this Agreement. Document steps taken in soliciting and awarding the contract(s) and submit them to the SWRCB Project Representative for review.
- 1.6 At the completion of this project and prior to final payment, the Contractor's Project Representative shall fill out and provide a project survey form to the SWRCB Project Representative.

Task Deliverables: 1.2 Quarterly Progress Reports, 1.4 Contract Summary Form, 1.5 Subcontractor Documentation, 1.6 Project Survey Form

Discussion

Contracts were executed with Kestrel Consulting, Inc. to provide project coordination and Harris & Associates Engineers to complete the basemap for the plan and design and engineering for the first dry weather diversion. A permit from the sanitation district and a coastal permit are required for installation of the dry-weather diversion. A permit will be filed with the Planning Department and an application for a coastal permit will be submitted on completion of this CBI project. Quarterly progress reports were submitted on July 9, 2004, October 10, 2004, January 10, 2005, and March 30, 2005. A contract summary form was completed on June 21st, 2004 and a project survey form was submitted on December 30, 2004. The project survey form lacked a signature, and was re-submitted on March 30, 2005.

Task 2 California Environmental Quality Act (CEQA) Documents and Permits

- 2.1 Comply with CEQA requirements by obtaining a Notice of Exemption for the proposed bird barriers and gull proof trashcans.
- 2.2 Secure all required permits for the project. No work that is subject to permitting shall proceed under this Agreement until the SWRCB Project Representative receives documents that satisfy the permitting process(es).
- 2.3 Certify to the SWRCB that all approvals, entitlements, and permits necessary for the project have been granted.

Task Deliverables: 2.1 Notice of Exemption for bird barriers and gull proof trashcans; 2.2 Permits; 2.3 Certification of Approvals, Entitlements, and Permits

Discussion

Notices of Exemption were filed with the SWRCB on April 4, 2004 and November 10. The highest priority project identified in the Village Drainage Improvement Plan, a dry weather diversion, did not require environmental documents beyond the Notice of Exemption. The second priority project involving sewer line replacements, also did not require environmental documents. Therefore, this task focused on complete documents for the third priority project, a biofiltration wetlands project. An Initial Study and Mitigated Negative Declaration were completed on March 28, 2005.

Task 3 Village Drainage Improvement Plan

- 3.1 Prepare a draft Plan to determine bacterial reducing projects at the beach and to ensure that these projects are integrated and coordinated with other capital improvements for the City.

- 3.2 Submit the draft Plan to the SWRCB Project Representative for review and comment. The final Plan can be submitted with Task 6.3.

Task Deliverables: Task 3.1 Documentation of Coordinating Meetings and Plan Review; Task 3.2 Draft Plan

Discussion

The Village Drainage Improvement Plan was developed in a collaborative manner with other local agencies that have an interest in water quality management in Capitola. We had a coordinating meeting on July 8 with staff from the County Departments of Environmental Health and Public Works, as well as the Santa Cruz County Sanitation District. On August 3 we met with John Ricker of the County Environmental Health Department as well as Tamara Doan of the Coastal Watershed Council. As part of that meeting the group made a site visit to the Esplanade to view project sites and locations for bird barriers and priority improvements. The draft review of the Village Drainage Improvement Plan was circulated in November and reviewed by the following people: Don Alley, John Ricker, Chris Coburn, Rachel Lather, and Rachel Fatoohi, Karen Christensen. The Village Drainage Improvement Plan was submitted on January 10, 2005 and the Clean Beaches Program has received a copy.

Task 4 Bird Barriers and Gull Proof Trashcans

- 4.1 Prepare designs for bird barriers.
- 4.2 Install bird barriers on waterfront buildings and place gull proof trashcans on the beach and downtown waterfront areas.

Task Deliverables: Task 4.1: Completed Designs; Task 4.2: Photos of Bird barriers and gull proof trashcans installed

Discussion

An amendment was made to this task allocating all funds to install bird proof trash cans. A contract modification letter was submitted to Ms. Connie Perkins on November 29, 2004.

Bird Barriers: Through research, it was determined that Bird-Be-Gone™ barriers are the most suited to the waterfront rooflines. Outreach materials were developed and mailed out twice to waterfront businesses. This portion of task 4 could not be completed because we were unable to get the waterfront businesses to agree to install bird barriers despite repeated phone, mail, and personal contacts. Two businesses expressed interest; however, they were unwilling to commit to installing bird barriers at this time. We used the portion of the budget previously identified for bird barriers to purchase additional bird proof trash cans. A cost-share program was established for the installation of bird barriers with Capitola's

Prop 13 Coastal Non-Point Source Grant and efforts to get bird barriers installed will continue under that agreement.

Gull Proof Trash Cans:

Two different designs of gull-proof trashcans were purchased and installed in August, and we also tested a gull-proof trash can lid to fit existing City cans. By experimenting with these different models during the busy beach season, the City Public Works Department determined that the 32 gallon welded wire trashcans and plastic liners with handles offered superior protection from birds as well as ease in handling. A final order was placed on November 23rd for 30 trashcans and liners. In addition, two styles of lids were ordered, 15 dome lids and 15 flat lids. Pictures of the installed trashcans are included with this report.

Task 5 Environmental Documents

- 5.1 Based on the results of Task 3, complete environmental documents that satisfy the CEQA process for a capital improvement project to improve the storm and sanitary systems that will reduce bacteria at the beach.
- 5.2 Complete a Clean Beaches Initiative Project Questionnaire for the capital improvement project(s) identified in Task 5.1.

Task Deliverables: Task 5.1: Environmental Documents; 5.2 Project Questionnaire

Discussion

The highest priority project identified in the Village Drainage Improvement Plan was a dry weather storm drain diversion on the Esplanade. This did not require environmental documents beyond the Notice of Exemption. The #2 priority project, a sewer line replacement, also did not require environmental documents. Therefore, this task was amended to complete documents for the #3 priority project. This required a \$5000 budget adjustment, as well as an extension of the due date to March 1, 2005 as discussed with Ms. Connie Perkins. Funds were adjusted from the “Village Drainage Improvement Plan” task, which was completed for less than what was budgeted.

A project questionnaire (grant application) for implementation of priority projects was submitted on March 30, 2004 and a copy is attached.

Task 6 Reporting

- 6.1 Prepare a draft final report that summarizes project accomplishments and submit to SWRCB Project Representative for review and comment. The report shall include the following requirements:
 - 6.1.1 An introduction section including a summary of the conditions the project is meant to alleviate, the project's objective, the scope of the project, and a brief description of the approach and techniques used during the project.
 - 6.1.2 A list of task products previously submitted as outlined in the Schedule of Completion.
 - 6.1.3 Any additional information that is deemed appropriate by the SWRCB Project Representative and/or Contractor.
 - 6.1.4 Indicate whether the goals of the project have been met.
 - 6.1.5 Include information collected in accordance with the project Monitoring and Reporting Plan, including a determination of the effectiveness of the project in preventing or reducing pollution and the results of the monitoring program.
- 6.2 Prepare a final report that addresses comments from the SWRCB Project Representative.
- 6.3 Provide a Notice of Completion and formal acceptance of the project from the Contractor's Project Representative.

Task Deliverables: 6.1 Draft Final Report, 6.2 Final Report, 6.3 Notice of Completion and formal acceptance of the project by the City.

Discussion

Due dates for draft and final reports were advanced to reflect the change in the environmental documents task.. The draft final report was submitted on March 30, 2005. The final report due date was extended to May 30, 2005. The first three sections of the final report address: the conditions the project is meant to alleviate, project objectives, the scope of the project, and a brief description of the approach and techniques used during the project. A table of submittals is included in the task deliverable sections at the end of the task results section. The success and related discussion of this project is addressed in the project results section.

No monitoring was done for this project as is was primarily a planning effort, however public works maintenance staff report that the trashcans are effective at deterring birds and reducing trash on the beach.

5.0 Project Results

The Village Drainage Improvement Plan can now be used and referenced by all agencies interested in making water quality improvements in Capitola. The planning process has stimulated good discussions and collaborations regarding the priority projects identified in the Plan. For example the City and the County Sanitation District are now discussing how a lateral replacement program could be implemented. The planning process got everyone “on the same page” and empowered local agencies to move forward with water quality improvements, where previously they were stuck for lack of coordination. One of the purposes of the planning effort was to determine which projects should be put forward for implementation funding from the Clean Beaches Program and other grant programs. This has been accomplished.

Preliminary engineering and cost estimates were completed and a Notice of Exemption filed for the highest priority project identified in the Plan: a dry weather diversion on a storm drain at the Esplanade. Construction funding for this project is immediately available from the City’s Coastal Nonpoint Source Pollution Control Grant. The environmental documents are complete for a biofiltration wetland along Soquel Creek Lagoon. This is a high priority water quality improvement project, for which the City will seek grant funding for construction from the Clean Beaches Program. Two other high priority projects are included in the City’s Project Questionnaire (Clean Beaches grant application) for construction funding. These include:

1. Dry weather diversions at two stormdrain outfalls into the Lagoon between Stockton Avenue and the railroad trestle. If diversions are shown to be infeasible during the design process, oil/grit separators with trash dropouts will be installed.
2. Installation of oil/grit separators with trash dropouts at up to five outfalls on Soquel Creek upstream of Noble Gulch.

The bird proof trashcans are effective at reducing both the amount of food for the gulls and pigeons, and litter on the beach. Though we were unable to get the local businesses interested in installing bird barriers on their roofs, the effort will continue with the City’s other grant, and we perceive that the outreach attempts have been valuable in at least raising awareness of the bird problem, and the relationship to water quality.

The entire project has been completed on time and within the allotted budget.

6.0 Task Deliverables

<u>Task</u>	<u>Deliverable by Subtask #</u>	<u>Due Date</u>	<u>Date Submitted</u>
1 Project Management and Administration	1.2 Document Contracting and Expenditures in quarterly progress reports	7/10/2004 10/10/2004 1/10/2005	07/09/2004 10/10/2004 1/10/2004
	1.5 Contract Summary Form	10/10/2004	6/21/2004
	1.6 Subcontractor Documentation	10/10/2004	
	1.7 Project Survey Form	03/30/2005	12/30/04
2 CEQA	2.1 Notice of Exemption	03/2004	04/2004
	2.2 Required Permits	08/2004	11/10/2004
	2.3 Certification of Approvals, Entitlements, & Permits	08/2004	11/10/2004
3 Village Drainage Improvement Plan	3.1 Documentation of Coordinating meetings	12/2004	1/10/2005
	3.2 Draft Plan	09/2004	11/05/2004
	3.3 Final Plan	09/2004	1/10/2005
4 Bird Barriers and Gull Proof Trashcans	4.1 Completed Designs	08/2004	1/10/2005
	4.2 Photos of Bird barriers and gull proof trashcans installed	10/2004	1/10/2005
5 Environmental Documents	5.1 Environmental Documents	4/15/2005	3/31/ 2005
	5.2 Project Questionnaire	4/29/2005	3/31/ 2005
6 Reporting	6.1 Submit draft report	4/29/2005	3/31/ 2005
	6.2 Submit final report	5/30/2005	
	6.3 Submit Notice of Completion	5/30/2005	3/31/2005

7.0 Future Projects

Three projects identified in the Village Drainage Improvement Plan have been discussed previously in this report and are proposed for construction funding from the Clean Beaches Program. A project questionnaire has been completed for these:

- Stockton Avenue Storm Drain Outfall Improvements
- Biofiltration Wetland on Soquel Lagoon
- Storm Drain System Improvements on Soquel Creek

8.0 Notice of Completion

The notice of Completion for this project was filed with Ms. Connie Perkins on March 30, 2005.