

# **Plan Highlights of the Trinidad-Westhaven Coastal Watershed Management Plan**

## **Purpose of the Plan**

The collaborative Trinidad-Westhaven Coastal Watershed Project is developing an Integrated Coastal Watershed Management Plan (ICWMP) to identify water quality problems and design practical, community oriented solutions to address these problems. The non-regulatory Trinidad-Westhaven ICWM Plan will be available to stakeholders, agencies and the community as a resource for local efforts:

- To improve local water quality & supplies in the Trinidad-Westhaven coastal watersheds
- To respond to regulatory requirements
- To improve human well-being and the ecological health of the region
- To reduce polluted runoff to our creeks, beaches and Trinidad Bay & coastal waters
- To protect the important kelp beds designated as the Trinidad Head Area of Special Biological Significance (ASBS)
- To provide a basis for seeking future grant funding for identified projects on a priority basis

For these and other reasons described in the ICWMP, a number of local stakeholders, led by the City of Trinidad, have come together to analyze and address the issues affecting water quality in the region. The result of these cooperative efforts is a comprehensive planning document that identifies problems, solutions, and partnerships for achieving those solutions. The ICWMP is a working document that will be periodically changed in response to new information and shifting priorities. Local stakeholders and community members are committed to the stewardship of their watersheds and protecting the shared resources of the Trinidad Bay ASBS.

## **Trinidad-Westhaven Planning Area**

The area for the integrated planning effort includes the nine watersheds that have the greatest influence on water quality in the Trinidad Head ASBS and coastal waters. The planning area covers approximately 6,358 acres (9.9 square miles) of land. The following watersheds are included in the planning area:

- Mill Creek
- City of Trinidad drainage area
- Parker Creek
- McConnahas Mill Creek
- Unnamed drainage
- Deadman's Creek
- Luffenholtz Creek
- Joland Creek
- Two Creeks

The region is mainly rural, with over half of the land used for timber production. Population centers include the City of Trinidad, with approximately 311 residents, and the communities of Westhaven and Moonstone Heights, with a total of about 1,044 residents. Most of the land in the region is privately owned. Government and tribal entities with decision-making authority over

lands in the planning area include the City of Trinidad, the County of Humboldt, and the Trinidad Rancheria. Trinidad is the only incorporated city in the planning area.

## **ICWM Planning Approach**

During the planning process, a set of priorities and objectives were developed. From several meetings of the regional water management group, it became apparent that the issues of water supply, groundwater and wastewater management, stormwater runoff, and water quality needed to be integrated into a coastal watershed assessment and management plan.

The Trinidad-Westhaven Integrated Coastal Watershed Management Plan (ICWMP) addresses wastewater, stormwater runoff, and sediment as high-priority issues for watershed management. The overall approach to achieving the project objectives involves

- Identification of the pollutants of concern through watershed assessments and water quality monitoring
- Identification of specific management strategies to help reduce or eliminate those pollutants at their sources.
- Development of proposed action items, or management projects for wastewater, stormwater runoff and sediment
- Integration of these action items into the Trinidad-Westhaven ICWMP
- Develop the funding and support for implementing proposed projects

The ICWMP is intended as a working document, i.e. one that will be modified on an ongoing basis to address evolving stakeholder interests and new environmental information. Projects will also need to be reprioritized as some get implementation and additional information becomes available. The overall planning effort also includes updating the City of Trinidad's General Plan as a watershed planning document, as described in Chapter 12. Although the General Plan is regulatory, this document is not, and will not be binding on the stakeholders that adopt it.

Achievement of these objectives will improve local water quality and supply, reduce stormwater runoff pollution, improve ground water quality and reduce pollutant discharges into the Trinidad ASBS. These results are consistent with statewide and regional priorities including those of the California Ocean Plan, the California Coastal Zone Management Program, and the California Critical Coastal Areas Program and the North Coast Integrated Regional Water Management Plan (See Chapters 11 and 12).

## **Key Management Issues**

Management objectives for the Trinidad-Westhaven planning area were developed based on an analysis of existing environmental conditions, desired conditions, and regulatory requirements. As a result of the detailed wastewater, stormwater, and sediment analyses, a number of key management issues were identified under the general headings of water quality, water supply, stormwater management, watershed management, groundwater management, and ecosystems and habitat. The major findings related to each of these issues are summarized below.

*Water quality:*

- Degraded water quality conditions exist at Trinidad State Beach and Luffenholtz Beach due to a high presence of “indicator bacteria” that pose a threat to human health.
- Stormwater monitoring results on local streams indicated that concentrations of total coliform bacteria exceeded water quality standards in most of the samples collected, and concentrations of fecal coliform exceeded standards in some samples. Bacterial contamination poses a threat to the health of residents who obtain drinking water from local streams and springs, and to recreational users of local beaches and bays.
- Turbidity monitoring results on local streams indicated elevated levels of suspended sediment, particularly in those watersheds with higher densities of gravel and dirt roads. Excessive quantities of suspended sediment are detrimental to salmonid habitat, stream ecosystems, and the kelp beds of the Trinidad Head ASBS.
- On-site wastewater treatment systems (septic systems or OWTS) are used throughout the planning area, and may contribute to bacteria and nutrient pollution in local water bodies due to old age and lack of proper maintenance. Beginning on May 1, 2008, new and replaced OWTS will have to meet strict State requirements for operation and maintenance.
- There is insufficient data regarding the water quality impacts of current discharges into the Trinidad Head ASBS. Additional data are needed to identify appropriate measures for complying with the water quality objectives of the California Ocean Plan.

*Water supply:*

- Water diverted from Luffenholtz Creek by the City of Trinidad currently requires treatment for high levels of tannin and sediment during the rainy season. Maintaining a safe and reliable water supply will be necessary as the region’s population grows. A number of vacant lots exist in Trinidad and outlying areas; as these lots are developed, they will either require new water service connections or draw from groundwater or springs. Water conservation and water quality improvement are essential to protecting supplies for new and existing water users.

*Stormwater management:*

- The City of Trinidad’s storm drain system is incomplete, with some streets lacking proper drainage structures. There are a number of areas within the City where stormwater flows directly over the bluff, increasing the potential for bluff erosion. In addition, stormwater runoff entering the Trinidad Head ASBS has potential adverse effects on water quality and the kelp beds.

*Watershed management:*

- In the Trinidad-Westhaven planning area, water quality and aquatic habitats are influenced by a variety of factors that are not fully understood. A comprehensive long-term monitoring program is needed to document baseline conditions and identify trends for pollutants of concern.

- Land use practices such as road-building, residential development, and forestry activities have impacts on watershed health and may be managed to some extent. The Trinidad-Westhaven Regional Water Management Working Group supports the implementation of new City and County General Plan policies that will assist in reducing nonpoint source pollution and achieving other ICWMP objectives. The Group also recognizes that public outreach and voluntary landowner activities will be an effective way to meet the project objectives.

*Groundwater management:*

- Nonpoint source pollution affects groundwater as well as surface waters, which creates a problem as many residents pump drinking water from individual wells. General groundwater conditions in the planning area are not well documented.

*Ecosystems and habitat:*

- Trinidad Bay and its associated habitats comprise an important natural resource shared by the Trinidad-Westhaven community. Improving the quality of waters entering the Trinidad Head ASBS is the driving force behind this integrated watershed planning process.
- The Trinidad-Westhaven planning area supports a number of special-status species, including salmonids. The ability of salmonid species to migrate upstream is currently restricted by man-made and natural barriers; however, the upper watersheds are being managed for the possibility of salmonid recovery. Salmon, steelhead and coho recovery is a long-term goal for ecosystem management throughout the Trinidad area as well as the greater North Coast region.

## **Implementation of the ICWMP**

The ICWMP proposes to address these key water quality issues by implementing a variety of projects ranging from site-specific treatments to general watershed education. Implementation measures are focused on the areas of wastewater, stormwater, and sediment management. Most projects will be carried out on a voluntary basis, such as the recommendation of Best Management Practices for sediment reduction and erosion control. Project leaders will seek the involvement of as many landowners and other stakeholders as possible. Regulatory measures will be pursued only as they become necessary to comply with legal requirements, such as those of State Assembly Bill 885.

The primary benefit of ICWMP implementation will be an improvement of overall water quality and flora and fauna habitat in the planning area, including the Trinidad Head ASBS. Pollutants from wastewater effluent, stormwater discharge, and sedimentation are expected to be measurably reduced. Public awareness of water quality and water supply issues will be increased, as will community buy-in to improving water quality and protecting shared resources. Furthermore, environmental justice considerations will be addressed through the reduction of ecological impacts on the Tsurai village site, which contains sensitive cultural resources, and on the residents of Westhaven, which is classified as an economically disadvantaged community. No adverse impacts are expected.

## Next Steps

The ‘solution to water pollution’ will depend on a combination of actions by individuals, the Trinidad-Westhaven community, government agencies and the general public. These activities include:

- Maintaining involvement and input from stakeholders, landowners, agencies and the public
- Periodic review and update of the Integrated Coastal Watershed Management Plan (ICWM Plan) & incorporation of it into the Trinidad General Plan
- Following through with the long-term commitment of the Trinidad Bay Watershed Council
- Fostering partnerships and coordination with local stakeholders, state and federal agencies, and other local & regional water resource related efforts
- Securing funding and implementing the Plans to reduce pollutants and improve water quality in the Trinidad – Westhaven area

## Notes on the Document Itself

The ICWMP can be difficult confusing to try to read through. There is a lot of information included in it. There are some things that may be repeated, and others that may not seem applicable to our Trinidad-Westhaven project area. The State has certain standards for this type of document that must be met to qualify for bonus points on grant applications and other reasons. Therefore we had to address all the requirements, or at least say why they do not apply to the Trinidad area.

*Sections to focus on:*

- **Chapter 3 – ICWMP Objectives:** This is where the major issues relating to nonpoint source pollution, stormwater management, turbidity, septic systems, etc. are summarized in order to paint a picture that shows why we need a watershed management plan. This chapter also introduces the overall goals and objectives of the ICWMP.
- **Chapter 6 – Implementation:** This chapter describes the types of water quality improvement projects that are being proposed. There is a table (Table 4) which lists each project along with information such as the agency who will probably be responsible for implementing that project. In most cases the details have not been finalized yet, but there are several projects currently in progress (such as a stormwater management plan) which are also discussed in this chapter. Trinidad is listed as the “lead agency” for many of these projects because it is the City which received the Prop 50 grant and will continue to be in charge of water quality improvement efforts.
- **Chapter 7 – Impacts and Benefits:** This relatively short chapter discusses the benefits that will arise from implementation of the ICWMP. Environmental justice considerations are addressed.
- **Chapter 8 – Stakeholder Involvement:** This chapter describes the various government agencies and private organizations who participated in developing the ICWMP. Public involvement processes are also described.

*Maps and figures:* Maps showing general characteristics of the watershed are found mostly in Chapter 2, beginning on p. 9. Average results of bacteria sampling are shown in the map on p. 33.

*Other State-required sections:*

- **Chapter 1 – Introduction:** The purpose of this chapter is to provide an overview of the ICWMP and the planning process that led to its development. This is different from the Executive Summary in that it does not summarize the goals and findings of the ICWMP.
- **Chapter 2 – Regional Description:** The purpose of this chapter is to describe the general characteristics and existing environmental conditions found in the planning area. A detailed watershed assessment is available as a separate document.
- **Chapter 4 – Water Management Strategies & Integration:** The purpose of this chapter is to document the various water management strategies that will be used to implement the ICWMP, as required by the State Integrated Regional Water Management Grant Program. Some of the strategies that must be considered are not applicable to our region, while others are directly related to the kinds of projects we want to do.
- **Chapter 5 – Regional Priorities:** The purpose of this chapter is to identify short-term and long-term priorities for implementation of the ICWMP, and to describe the process for modifying those priorities as needed. This is less important than the projects table found in Chapter 6, in which each project is assigned a priority level of High, Medium or Low.
- **Chapter 8 – Technical Analysis & Plan Performance:** The purpose of this chapter is to describe the methods that were used to analyze watershed conditions and reach the findings presented in Chapter 3, and to identify standards by which the Plan's success will be measured.
- **Chapter 9 – Data Management:** The purpose of this chapter is to describe how data relevant to this project have been and will be collected, stored, and distributed.
- **Chapter 10 – Financing:** The purpose of this chapter is to describe, generally, how implementation measures proposed by this Plan will be financed. It is hoped that future funding will be obtained through grants. Specific projects will be conceptualized in more detail when it comes time to develop a grant application.
- **Chapter 11 – Statewide Priorities:** The purpose of this chapter is to describe how implementation of the ICWMP will contribute to statewide and State agency priorities for water management. For example, our plan helps to address a statewide goal of reducing nonpoint source pollution.
- **Chapter 12 – Relation to Local Planning:** The purpose of this chapter is to identify linkages between the ICWMP and other local planning efforts such as the North Coast Integrated Regional Water Management Plan.
- **Chapter 14 – Agency Coordination:** The purpose of this chapter is to describe the involvement of State and federal agencies in the planning process.

*Appendices*

- **A – Letters of Support:** This appendix includes all the letters of support the City received from various stakeholders during the submittal of the grant that was used to develop this document.
- **B – Results of GIS-Based Watershed Analysis:** This appendix includes statistical tables related to land use type, lot sizes and impervious surfaces that were generated with the GIS (Geographical Information Systems) software.

- **C – Disadvantaged Community Calculation for Westhaven:** This appendix details the calculations that were used to determine that Westhaven qualifies as a “disadvantaged community” which helps earn bonus points on grant applications.
- **D – Water Quality Sampling Reports:** These include all the water quality sampling results from the four wastewater sampling events. No analysis is included in these reports.
- **E – OWTS Permit Analysis:** This document includes the detailed results of the permit assessment that was conducted as part of this project. This task included inventorying the septic files at the Health Department and compiling the available OWTS data by property and by watershed. Most of the analysis was done with the GIS.
- **F – Wastewater Management Action Plan:** This appendix is the action plan specific to wastewater issues that was put together to guide the creation of this overall ICWMP. It includes the background information and recommendations that were used in the development of the ICWMP.
- **G – Stormwater Action Plan:** This appendix is the action plan specific to stormwater issues that was put together to guide the creation of this overall ICWMP. It includes the background information and recommendations that were used in the development of the ICWMP.
- **H – Watershed Assessment Management Action Plan:** This appendix is the action plan specific to sediment issues that was put together to guide the creation of this overall ICWMP. It includes the background information and recommendations that were used in the development of the ICWMP.
- **I – NPS Management Measures Evaluation Summary:** This appendix is a tabular summary of the Nonpoint Source Management Measures that have been adopted by the Coastal Commission and how they are being implemented or considered in Trinidad.
- **J – Summary of Public Comments:** This is pretty self explanatory and includes a summary of the comments received on the draft version of the ICWMP.