

## CHAPTER ONE: INTRODUCTION

The natural beauty of *Puget Sound* has lured people to its shores for hundreds of years, and the essence of that beauty is rooted in the abundance and quality of its waters. **THE KEY PENINSULA/GIG HARBOR/ISLANDS (KGI) WATERSHED PLAN** (the Plan) is devoted to protecting the quality of the water in both the *Sound* and in the streams and lakes that eventually drain into it. The *KGI Watershed Committee* has dedicated their work to resolving existing water quality problems as well as protecting water bodies from becoming polluted in the future.

A "watershed" is a geographic area which includes all of the land which drains to a common outlet. In the *KGI Watershed*, it includes all of the land west of the *Narrows Bridge* which drains to saltwater in *Pierce County*. Since water runs downhill, the topography of an area determines the watershed boundary. Watershed boundaries can cross a variety of jurisdictional boundaries.

### NONPOINT POLLUTION

"Nonpoint Pollution" is water contamination which cannot be specifically identified with a single source or operation. Point sources of pollution typically include commercial, industrial, and wastewater treatment outfalls. The implication is, that any source of pollution which does not have a single discharge location, as a point source does, is considered nonpoint pollution.

Nonpoint pollution comes from a variety of everyday activities such as farms, roads, septic systems, boats, stormwater, and clearing activities. These types of activities would not usually cause problems if they occurred infrequently, but it is the cumulative effect which combine to cause water quality problems.

### AUTHORITY

The *Authority* under which the Plan was written goes back as far as the federal *Clean Water Act* of 1972. "Section 319" of the Act required states to address water pollution from nonpoint sources. The *Puget Sound Water Quality Authority* was formed in 1985 by the *Washington State Legislature* to meet stipulations included in amendments to the Act and the *Authority* proceeded to publish the first PUGET SOUND WATER QUALITY MANAGEMENT PLAN in 1987.

The Plan included an approach for dealing with nonpoint pollution that involved the establishment of Washington Administrative Code 400-12 or the *Nonpoint Rule* in 1988. The Rule provides guidance to counties on how to develop plans for addressing nonpoint pollution.

The Nonpoint Rule guides counties through the process of prioritizing or ranking the watersheds which need attention first. *Pierce County* completed its watershed ranking in 1988. The Rule then provides a framework for characterizing a watershed, establishing a watershed committee and developing an action plan to address nonpoint pollution. The *Washington State Legislature*, through the *Washington State Department Of Ecology*, funded the development of watershed action plans through the *Centennial Clean Water Fund*. This watershed Plan was funded under that program with substantial financial contributions from *Pierce County*, who is also serving as the lead agency.

## **PURPOSE**

The purpose of the **KEY PENINSULA/GIG HARBOR/ISLANDS WATERSHED ACTION PLAN** is to identify, correct, and prevent nonpoint source water pollution and protect beneficial uses of water. Beneficial uses of water include: the aquatic and upland ecosystem, potable water supply, recreation, raising domestic plants and animals, quality of life, aquaculture, cleansing, commercial/industrial, agriculture and forestry, fire protection, and transportation.

Two documents are created as a result of the watershed planning process. First, a "Characterization Report" is written which compiles scientific data available on existing and historic conditions within the watershed. Second, the watershed committee takes that information and develops a "Watershed Action Plan." The Plan includes goals, objectives, and recommendations for resolving nonpoint pollution issues.

The *Watershed Committee* members are the principal authors of the Plan. The *Committee* is made up of citizens, agencies, and other stakeholders with an interest in the watershed. They are intended to represent diverse interests from within the watershed. The watershed committee makes decisions through consensus rather than traditional voting. The purpose of the *Committee* is to involve the community in the process as much as possible, build community investment in making changes, and to create a forum where people with diverse opinions can work through differences.

## LOCATION

The watershed being addressed in this Plan is the *Key Peninsula/Gig Harbor/Islands (KGI) Watershed*. It is a small part of the *Kitsap Water Resource Inventory Area (WRIA #15)*. The *KGI Watershed* straddles the border between *Pierce and Kitsap Counties, Washington*. The watershed boundary does cross into *Mason County* but the amount of land included is extremely minimal. The watershed lies between *Case Inlet* on the west, and *Dalco Passage* and *The Narrows* on the east. The watershed's northern boundary is in southern *Kitsap County*, and the southern boundary is formed by the *Nisqually Reach, Puget Sound, and Cormorant Passage*. (See Figure 1—Plan Area.) The watershed contains approximately 101,000 acres, or 158 square miles of land and 144 miles of shoreline. It is composed of two large peninsulas and many islands. The three largest islands are *Fox, McNeil* (state-owned), and *Anderson*. There are a number of smaller islands, including *Raft, Herron, Cutts, Eagle, Gertrude, Tanglewood, and Ketron*. It includes the incorporated *City of Gig Harbor*, as well as the unincorporated communities of *Burley, Home, Vaughn, Rosedale, Longbranch, Lakebay, Key Center, Lake Holiday, and Purdy*. (Approximately 22,029 acres of the watershed fall within *Kitsap County*.)

## HISTORY OF WATER QUALITY EFFORTS

The KGI WATERSHED PLAN is not the first effort taken to improve water quality in this area. As early as the 1970's, it became apparent that water quality problems were impacting the wholesomeness of the area shellfish. In 1978, *Pierce County* adopted environmental regulations implementing the *State Environmental Protection Act* at the local level. As part of this ordinance, the *Pierce County Council* identified *Burley Lagoon, Minter Lagoon, Filucy Bay, and Rocky Bay* as "Environmentally Sensitive Areas." In 1982, both *Burley* and *Minter Lagoons* were prohibited for shellfish harvesting because of water quality problems. In 1983, the *Washington State Department of Ecology* initiated a study of the fecal coliform bacteria levels in *Burley* and *Minter Lagoons*. The results of that study were published in 1985.

In 1984, *Ecology* gave *Pierce County* a grant to develop a "Plan of Action" which would reduce the amount of bacteria reaching *Burley* and *Minter Lagoons*. *Pierce County* hired *Jones and Stokes* to prepare the Plan which was completed in 1986. Public dissatisfaction with the Plan prompted *Pierce County* to work with local residents to develop the BURLEY/MINTER DRAINAGE BASIN WATER QUALITY PLAN which was completed in 1988. The Burley-Minter Plan was identified as an *Early Action Watershed Plan* by the *Puget Sound Water Quality Authority* because it addressed nonpoint pollution concerns but did so prior to the adoption of the Nonpoint Rule or WAC 400-12. Land use regulations specific to the basin were passed by the *Pierce County Council* in 1989.

Additional grants have been received by *Kitsap County, Kitsap Conservation District, Bremerton-Kitsap County Health Department, and the Tacoma-Pierce County Health Department* to implement elements of the Burley/Minter Plan. In 1993, *Burley Lagoon* was upgraded from prohibited for shellfish harvest to conditionally approved. However, in 1993, *Kitsap County* took the lead on the *Burley Lagoon Shellfish Protection Initiative Grant* which combined stormwater control, on-site systems surveys and repairs, and small farm plan implementation in one concerted effort. This program was completed in 1996 and was intended to prevent another downgrade of *Burley Lagoon*.

In addition to the activities occurring in the *Burley-Minter* area, the *Tacoma-Pierce County Health Department* completed the *PENROSE POINT/MAYO COVE WATER QUALITY PROTECTION PLAN* and the *GIG HARBOR GROUND WATER MANAGEMENT PROGRAM* in 1992. These efforts resulted in the creation of the *Mayo Cove Citizen Advisory Committee* and the *Gig Harbor Groundwater Advisory Committee* which are both still active.

*Rocky Bay* was downgraded by the *Washington State Department of Health Shellfish Division* in 1995, which has resulted in the creation of the *Rocky Bay Shellfish Protection District, Rocky Bay Shellfish Protection Program, and the establishment of the Rocky Bay Basin Advisory Team*. Currently, efforts are ongoing to resolve problems related to stormwater and failing septic systems which are contributing to bacterial loading in *Rocky Bay*.

## **WATERSHED PLAN DEVELOPMENT**

In 1994, *Pierce County* was awarded a *Centennial Clean Water Fund Grant (CCWF)* by the *Washington State Department of Ecology* to develop a watershed plan for the *KGI Watershed*.

### **The Watershed Committee**

The *Key Peninsula Gig Harbor-Islands Watershed Committee* was formally appointed by the *Pierce County Council* in 1996. A wide variety of backgrounds are represented on the *Committee* and membership includes agency, business, organizational, and citizen representatives (A complete listing is included in the front of this document). The committee members were directly involved in developing all of the goals, objectives, and recommendations included in this Plan. Watershed staff employed by *Pierce County* facilitated the committee's decision-making process and developed documents based on those decisions.

### **Subcommittee Process**

Being a citizen-driven process, local values, information, knowledge and energy were the glue used to bring this whole effort together. In order to maximize the amount of public and agency involvement in developing the Plan, subcommittees were created to deal with individual issues or sources of pollution (e.g.; boats and marinas, on-site sewage systems, stormwater and erosion, etc.). Each

subcommittee offered a field trip, classroom sessions with key agencies, and workshops to develop goals and recommendations for their issue. The purpose of the individual subcommittees was to allow people and agencies to participate in just one issue if that were their only area of concern, and to maximize the amount of public participation in generating the Plan. The purpose of the field trips and classroom sessions was to ensure that all participants felt like they had enough information to adequately discuss various solutions. All sessions and field trips were open to the public and advertised. Each subcommittee had at least one full committee member. Each subcommittee presented their *Goals and Action Items* to the full committee for review.

### **Public Involvement**

Watershed staff attempted to frame the process in a way that would allow a maximum amount of public involvement. All committee meetings have been held within the *Watershed* boundaries. A distribution list of interested parties has been maintained throughout the process. Notices for all committee meetings were mailed to committee members, interested parties, local newspapers, and libraries.

In addition to traditional notices, public involvement at the actual meetings was enhanced by including all attendees as much as possible and by using a variety of participatory methods.

### **Coordination**

Coordination with other agencies occurred by including agencies on mailing lists and inviting staff members to present educational materials, comment on draft documents, and participate in applicable meetings. Efforts have been made to coordinate closely with the *Tacoma-Pierce County Health Department, Kitsap County, the Washington State Department of Ecology, the Washington State Department of Fish and Wildlife, the Pierce County Conservation District, Kitsap Conservation District, Pierce County Planning and Land Services, and the Washington State Department of Natural Resources*. In addition, watershed staff have attended meetings hosted by other organizations which offer updates on changes in state and local activities related to water and shorelines.

## **DESIRED OUTCOMES**

The desired outcomes for the plan incorporate directions from two key places; the Nonpoint Rule (WAC 400-12) and the guidance of the *KGI Watershed Committee*. The desired outcomes include the mission, goals, and objectives of implementing the **KGI WATERSHED ACTION PLAN**.

## MISSION STATEMENT

***“To protect water quality and beneficial uses of water by reducing water pollution from nonpoint sources.”***

### Goals and Objectives

- 1) ***Land development will be conscientiously sited to protect beneficial uses of water and environmentally sensitive areas.***
  - Riparian, wetland, and shoreline buffers will be adequate to protect beneficial uses.
  - There will be a high-rate of compliance with *Comprehensive Plans* and *Critical Areas Ordinances*.
  - A revised and updated *Pierce County Shoreline Master Program* will be in place.
  - There will be an increase in riparian cover.
- 2) ***The groundwater supply will be ample and safe for consumption by humans, animals, and plants.***
  - Groundwater quality will meet or exceed “Washington State Groundwater Standards.”
  - Saltwater intrusion problems will be contained.
- 3) ***Good habitat and high quality water will support a healthy and diverse population of native plants, animals, and aquatic organisms.***
  - There will be an increase in the number of parcels and acreage in “Open Space” taxation designations.
  - There will be an increase in the amount of stream miles available for salmon spawning.
  - There will be healthy and increasing native fish populations.
- 4) ***Surface water quality will be superior and beneficial to the health of fish, shellfish, macroinvertebrate, wildlife, and human populations.***
  - Surface water quality will meet or exceed “Washington State Water Quality Standards” (WAC 173-201A as amended).
  - Macroinvertebrate sampling will show healthy population numbers and greater species diversity.

- 5) ***Stormwater will enter stream systems more gradually, with lower peak flows, and will preserve historic year-round flow levels.***
  - There will be a high-rate of implementation of stormwater “Best Management Practices” (BMP’s).
  - There will be reduced levels of impervious cover.
  - Storm events will result in lower and longer peak flows in local streams.
- 6) ***Watershed residents will be educated about water quality issues and will take action to protect, restore, and steward the environment.***
  - More watershed residents will participate in *Stream Team* and/or habitat restoration events.
  - There will be increased participation in programs like the *Backyard Wildlife Sanctuary Program*.
  - There will be a noticeable shift in local sales away from hazardous household and garden products in favor of environmentally friendly alternatives.
- 7) ***Natural resource harvesting will be sustainable and equitable.***
  - There will be a healthy and stable farmed forestry industry in the watershed.
  - There will be a healthy and stable local sportfishing industry in the watershed.
- 8) ***Shellfish growing areas will be numerous and produce shellfish which are safe for consumption and abundant.***
  - All commercial and recreational shellfish beds will be open for harvest.
  - Production levels for shellfish from within the watershed will increase.
- 9) ***There will be a significant reduction in the amount of solid waste generated, stored, and illegally dumped.***
  - There will be a significant reduction in illegal dumping incidents.
  - There will be an increased rate of recycling by watershed residents with more opportunities for recycling a wider variety of wastes.
- 10) ***A clear, effective, cooperative system will be in place to identify problems and respond to water quality concerns.***
  - An ongoing sampling and monitoring program will be in place.
  - Agency roles will be defined for responding to concerns.
  - Implementers of the KGI WATERSHED ACTION PLAN will meet regularly.
  - There will be active resident involvement in identifying and reporting water quality concerns, and in Plan implementation.
  - Regular reports on the progress of Plan implementation will be issued.