MEASURING FOR RESULTS

KING COUNTY DEPARTMENT OF
NATURAL RESOURCES AND PARKS

Third Annual Performance Measure Report – 2004

June 2005

King County
Department of
Natural Resources and Parks

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A PDF version of this report is available online at *http://dnr.metrokc.gov/dnrp/performance/*

June 2005

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FROM THE DNRP MANAGEMENT TEAM

Since our department began carrying out far-reaching performance measure work in 2003, the development and use of performance measures have broadened within the agency and the county. What's more, performance measurement has become a sustained national movement in state and local government, and a growing interest of residents and citizens concerned with government accountability and transparency.

Despite the broader use of performance measurement within government, the core challenge facing our department remains the same: continue to produce excellent results with diminishing resources. The targets we have set for ourselves remain very ambitious, even more so given the continuing need to operate with increasing efficiency.

We remain determined to measure our performance and use performance information to improve the environment and quality of life in King County. We also strongly believe that communicating this information with our elected officials, cities, county residents, and our own employees is essential. We hope that publishing these measures and indicators can make our intentions clearer to our organizational partners, be they citizens, non-profit organizations, local government, or state and federal agencies.

Since our first report two years ago, we have been recognized within the county and by a national peer-review panel for producing a high quality, informative report. We are particularly proud that the report was awarded a "Certificate of Excellence in Service Efforts and Accomplishments Reporting" by the Association of Government Accountants. We take pride in our accomplishments and continue to use this information to improve our services and results for the community.

OUR APPROACH

Effective performance management relies on measuring our performance relative to our mission and goals and adjusting our management strategies accordingly. Our main reasons to measure performance are to:

- use information to evaluate how we achieve our mission and goals
- clearly communicate our ambitious targets and desired outcomes
- increase the value and benefits of our services
- develop ongoing support from elected officials, partner organizations, and residents
- focus our limited resources to achieve maximum benefits
- communicate our successes and challenges
- enhance staff morale and team cohesion.

WHAT'S NEXT?

This is the third annual performance measure report produced by DNRP. For most measures we are able to see trends and track performance over time. The number of yellow and red measures reflects the high standards we have set, the long term nature of environmental change, and the reality of resource constraints.

Two major changes are important to note. A new salmon indicator is reported for the first time, reflecting several years of hard work on the part of local governments, co-managers, and many stakeholders to produce salmon recovery plans. We have also added key efficiency measures for each of our four divisions in order to focus our attention on how efficiently we operate. One indicator—a normative flow index for streams—that describes complex physical and biological conditions is still under development. A place-holder description is included in the report to explain its relevance and intended use.

We look forward to your comments on the report, our strategies, and the department's overall efforts to achieve a sustainable and livable community and a clean and healthy natural environment.

Pam Bissonnette
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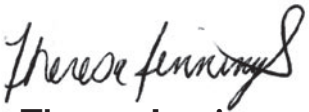

Theresa Jennings
Division Director
Solid Waste Division

Don Theiler
Division Director
Wastewater Treatment Division

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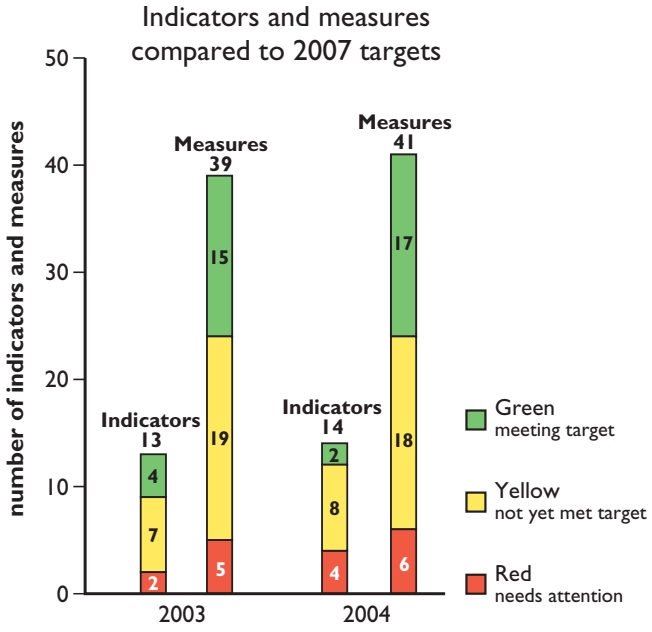
EXECUTIVE SUMMARY

The Department of Natural Resources and Parks (DNRP) is now in its third year of using a results- or outcome-based performance management system to monitor progress towards accomplishing our goals. This system was developed to measure and report the key information required to understand the condition of King County's natural environment and the results of the department's programs. DNRP uses this information to improve our performance and service delivery through a variety of approaches, including programmatic analysis, strategic business planning, and the budget process.

Out of 14 *environmental indicators*, two are currently meeting their 2007 target, eight are not yet meeting or are below the target, and four need attention. Of 41 rated *performance measures*, 17 are currently meeting the 2007 target, 18 are not yet meeting or are below the target, and six need attention. We will continue to focus resources on the 17 measures that are meeting targets to ensure we maintain high performance. The 18 measures that have not yet reached their 2007 targets require ongoing attention and the six red measures need significant programmatic and budget resources.



Measures that improved so that they changed colors (either from red to yellow or from yellow to green) from last year are:

- Wastewater permit compliance (No. 1) (yellow to green)
- Marine beach bacteria levels near outfalls (No. 6b) (red to yellow)
- Water reclaimed (No. 19) (yellow to green)
- Curbside recycling participation (No. 24) (yellow to green)
- Volunteer hours for Parks (No. 27) (yellow to green)
- Agricultural lands with best management practices (No. 31) (red to yellow)

Measures that declined so that they changed colors (from green to yellow or yellow to red) from last year are:

- Dissolved oxygen meeting guidelines and standards near outfalls (Nos. 7b & d) (green to yellow)
- Phosphorus in managed lakes (No. 9b) (yellow to red)
- Agricultural lands (No. 28) (green to yellow)
- Forestlands (No. 29) (green to yellow)
- DNRP as a resource (No. 33) (yellow to red)
- DNRP as a leader (No. 34) (yellow to red)
- Entrepreneurial revenue (No. 38) (yellow to red)

It is significant that all of the six improved areas are agency performance measures, while four of the nine areas that declined are environmental indicators. The financial measure that declined since last year indicates the financial challenges faced by the department.

The summary diagram of all indicator and measure ratings can be found on the inside back cover.

The department has set aggressive targets because of our desire to use measures to improve our operations and the environment. In this third year of an ongoing process, the number of yellow and red measures and indicators shows how much work still needs to be done. In addition, the yellow and red measures show where resources should be directed to help us achieve success.

This document is to be used as a tool to assist decision-making and as the basis for informed discussion and debate about how we, as an agency, are best able to accomplish our mission and goals and meet the needs of the residents of King County.

INTRODUCTION

REPORT CONTENTS

DNRP has created a results- or outcome-based performance management system to track progress toward accomplishing our goals. This system was developed to better understand the condition of King County's environment and the results of the department's diverse programs.

This introductory section includes:

- a brief overview of the department and its responsibilities
- background information on performance management in King County
- a description of the conceptual framework for DNRP's performance management system
- definitions and a discussion of key terms: outcomes, performance measures, and indicators
- a brief description of departmental and divisional performance measurement approaches
- a detailed discussion of the rating system for evaluating our performance
- a summary of how performance measures are being used by the department.

New this year is a table (page 16) describing major changes in each of the measures or indicators, allowing readers to quickly grasp significant content differences from last year's report.

The majority of the report is in sections that present indicators and measures for each of the department's seven goals (page 8). For each goal, specific outcomes are defined and one or more performance measure or indicator describes each outcome. Each measure or indicator explanation provides information on:

- why it is important
- how it is determined or calculated
- historical or baseline data
- the most recent available data
- 5-year targets (set in 2002 for 2007)
- a long-term, desired outcome based on a benchmark, regulatory standard, or percentage
- relevant observations about the data or other contextual information
- our strategy to maintain or improve performance
- this year's (2004) rating
- references.

The report concludes with an analysis of our overall performance, an assessment of how well we are attaining our goals, and suggests priorities designed to focus management attention.

ABOUT THE DEPARTMENT

King County's Department of Natural Resources and Parks (DNRP) manages a wide variety of programs affecting King County's land, water, air, wildlife, parks and recreational areas. The department is organized into four divisions: Parks and Recreation (Parks), Solid Waste (SWD), Wastewater Treatment (WTD), and Water and Land Resources (WLR). Our 1,650 employees work on programs as diverse as solid waste disposal, wastewater treatment, river levee maintenance, farm and forestland protection, water quality protection, and public recreation.

King County's regional parks system encompasses more than 25,000 acres of regional parklands, trails, natural lands, open space, playfields, and recreational facilities. King County's parks and open space areas include regional treasures such as the 640-acre Marymoor Park, the 3,000-acre Cougar Mountain Regional Wildland Park, a 170-mile regional trail system, and the world-class King County Aquatic Center swimming and diving facility. Parks puts on regional entertainment and educational events, and operates the King County Fairgrounds, home of the King County Fair. The county also operates more than 100 recreational ballfields within parks. Parks offers a selective number of recreational programs focused on aquatics and a teen program at the White Center community center. Other recreation programs are run by non-profit partner organizations using Parks facilities, including ballfields.

SWD provides environmentally responsible transfer and disposal services to residents and businesses in King County (except for the cities of Seattle and Milton). Public awareness and education campaigns are used to encourage conservation of resources and to promote recycling. The division's customers include non-residential and residential self-haulers as well as commercial garbage haulers. SWD runs eight transfer stations, two rural drop boxes, and the only operating landfill within King County – the Cedar Hills Regional Landfill in Maple Valley.

WLR leads the region in the implementation of comprehensive programs for flood hazard reduction, storm and surface water, water quality, groundwater protection, agriculture, small lot forestry, resource land acquisition, habitat restoration, drainage project construction, and Endangered Species Act-related watershed restoration efforts.

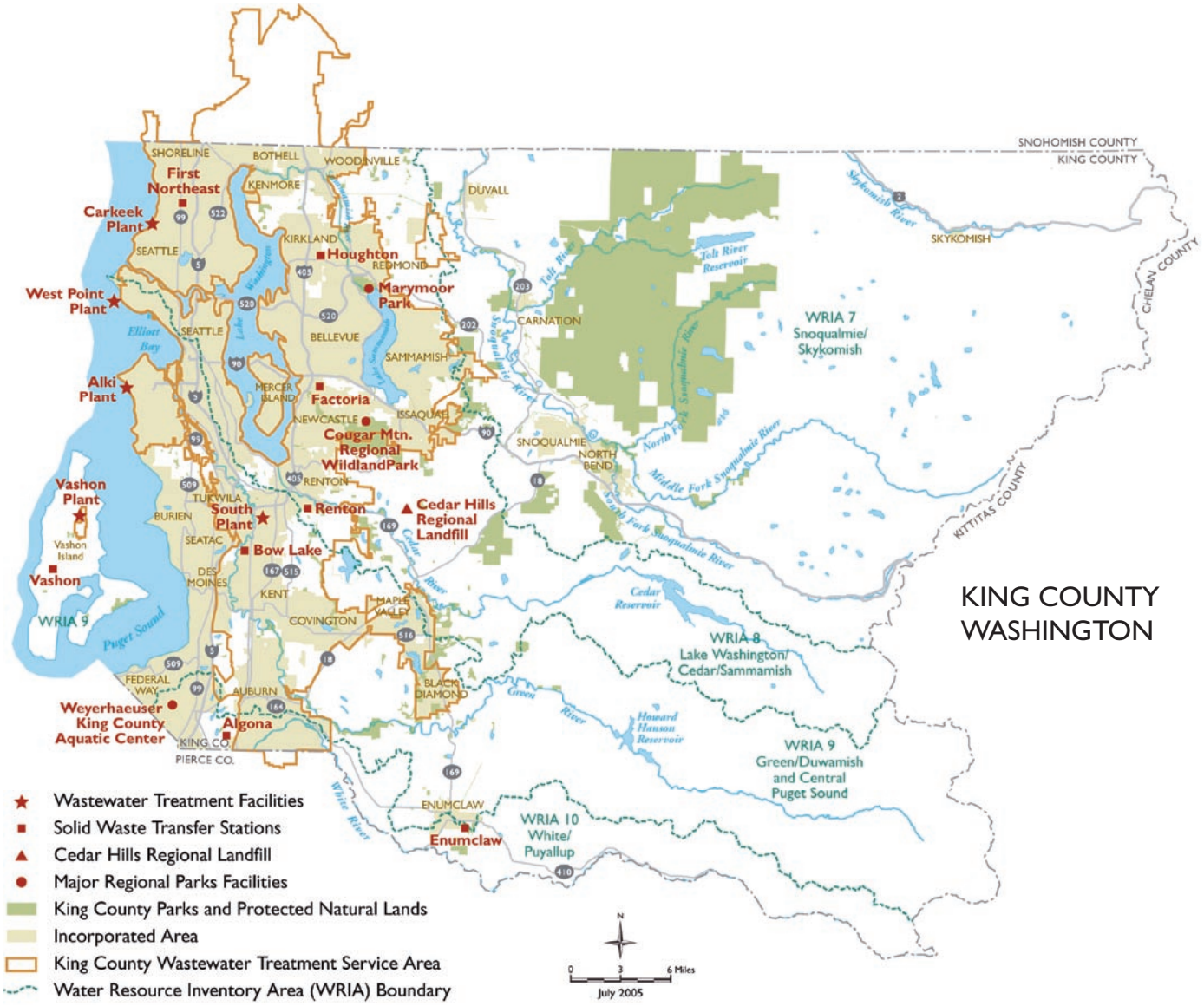
WTD maintains and operates the equipment and facilities that collect and treat wastewater before it is reused or released into Puget Sound. The division provides wholesale wastewater services to 18 cities, 15 sewer districts, and the Muckleshoot Utility District, serving nearly 1.4 million residents and businesses in King County and parts of Pierce and Snohomish counties. WTD also recycles the byproducts of the waste water treatment process—primarily biosolids, energy, and reclaimed water—in ways that benefit the environment and ratepayers.

Detailed information about the department's and divisions' budgets is presented in Appendix 1.

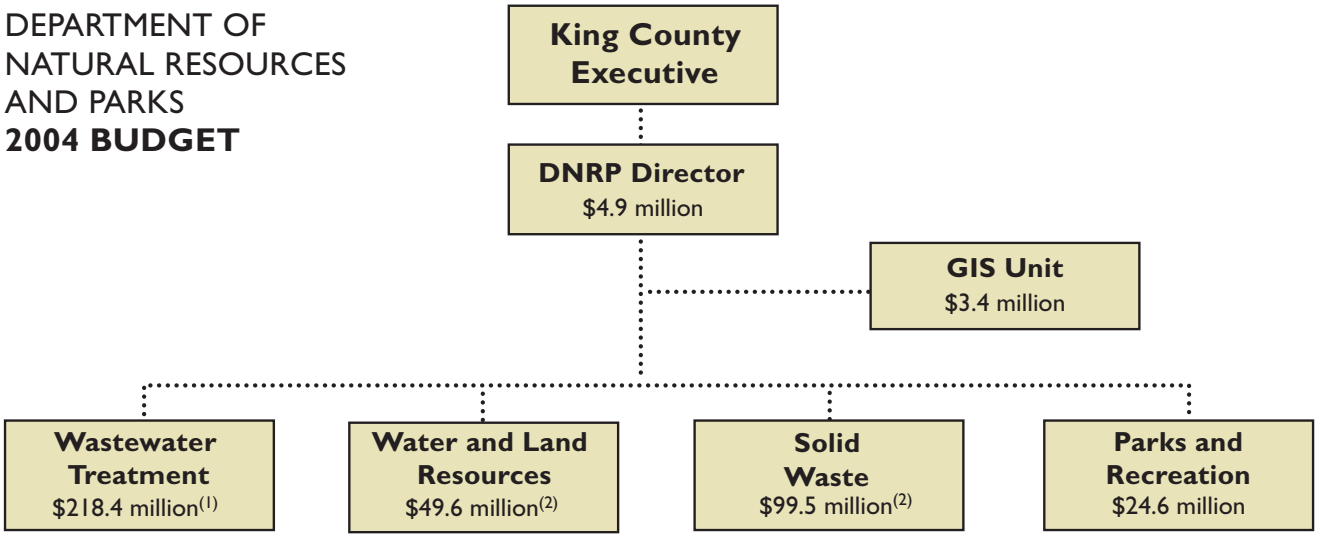
BACKGROUND

Performance Measurement in King County

King County has a long-standing interest in using performance measures to improve county operations and align programs with desired outcomes. As early as 1991, the



DEPARTMENT OF NATURAL RESOURCES AND PARKS **2004 BUDGET**



Notes:
(1) Includes operating expenditures, debt service, and transfers to reserves and CIP. (2) Includes operating expenditures, debt service, and fund balance.

King County Auditor surveyed all county agencies' use of performance measures. In 1995, the Metropolitan King County Council passed legislation that directed the County Executive to develop and implement a countywide performance measurement system, start the process with three key agencies, and produce annual reports for policy makers and the public.

In 1998, King County Executive Ron Sims defined a vision for the county that included being a "high performance organization." To implement that vision, in 1999 the County Executive created a team whose mission was to develop a consistent process for business planning and performance measurement for county government. The (then) Department of Natural Resources started to develop a performance management framework that would define performance measures for the departmental goals and identify how the measures would be used in a strategic planning, program evaluation, and budgeting context.

Concurrent with the County Executive's initiative, the department's divisions were pursuing their own efforts to improve their organizations, including performance measurement and management: WTD developed the Productivity Initiative, SWD created the Competitiveness Project, and WLR produced a Strategic Plan. In 2002, the department merged with the Department of Parks and Recreation to create the Department of Natural Resources and Parks. The new Parks and Recreation Division subsequently created the Parks Business Plan that serves as a strategic guide for the division's new entrepreneurial approach.

Since 1995, the county has produced an annual Benchmark Report under the auspices of the Metropolitan King County Growth Management Planning Council. While the primary focus of the Benchmark Report is to track the impacts of policies related to the Growth Management Act as implemented by all of county government (rather than any specific department) and other local jurisdictions, many of the Benchmark indicators relate to environmental outcomes that are important to DNRP. The Benchmark Report provides a broader look at countywide outcomes than DNRP's department-specific performance measures report. The Benchmark Report is also used to show the broader context of changes occurring in the economic, housing, land use and transportation sectors of the county. The most recent version is available at *www.metrokc.gov/budget/benchmrk*.

Recent Efforts

Since 2003, the County Executive and County Council have continued to focus on performance measurement. In 2003, the County Executive created an Executive Performance Measurement Initiative that resulted in every executive department developing a mix of output and outcome measures that were to be reported quarterly to the Executive and the Office of Management and Budget. These measures, collected together in the form of "The Blue Book" accompanied the Executive's 2004 and 2005 budget submittals to the County Council. The Blue Book is available at *www.metrokc.gov/budget/*. Further details on the Executive's Initiative are at *http://apps01.metrokc.gov/www/exec/perform/index.cfm*.

Starting in early 2005, a cross-departmental group of managers convened by the Executive Office began discussions about how to use performance data more effectively. The managers' recommendation was to create a sustained, internally-focused management forum – now under the name of "KingStat" – for the Executive and departmental management teams to make policy and operational decisions based on performance data. KingStat aims to use all departmental performance measures more regularly in

Executive and departmental decision-making meetings. These performance data oriented meetings will begin in January 2006 and will complement ongoing efforts at both departmental and Council levels.

Concurrent with the Executive's Performance Management Initiative, the County Auditor convened a Performance Measurement Work Group that brought together managers and staff from the County Auditor, County Council, and Executive departments to create a set of guidelines to improve the quality and presentation of performance measures submitted with the annual budget business plans. Using existing departmental business plans, including DNRP's, as examples, the work group created the guidelines to reflect best practices in performance measurement. The guidelines were designed to be 1) used by departments to ensure their performance measurement frameworks met the needs of Executive and Council reviewers and oversight functions, and 2) the guidelines simultaneously provide the Office of Management and Budget and County Council a template to review and critique departmental measures. The guidelines can be found at: *http://www.metrokc.gov/auditor/2004/PerMeasRpt.pdf*. Further work by the County Auditor on performance measurement can be found at *www.metrokc.gov/auditor/PerformanceMeasures.htm*.

DNRP'S PERFORMANCE MEASUREMENT FRAMEWORK

DNRP Vision, Mission, Goals

The primary focus of this report is a set of performance measures and environmental indicators. These performance measures and indicators are part of a single conceptual framework that aligns DNRP's vision, mission, and goals with its services.

Our vision is the future state we hope to attain by conducting our activities and core businesses.

VISION

Sustainable and livable communities –
Clean and healthy natural environment.

Our mission is the broadest statement about our purpose and why we exist.

MISSION

Be the steward of the region's environment and strengthen sustainable communities by protecting our water, land and natural habitats, safely disposing of and reusing wastewater and solid waste, and providing natural areas, parks and recreation programs.

As an organization, we need further definition of what our agency can achieve. Goals provide the next level, still broad, but specific to the department's role. These goals were developed by the department's leadership to strategically focus our services in achieving the department's mission.

GOALS

ENVIRONMENTAL QUALITY - Achieve a net gain in environmental quality by protecting and restoring the natural environment, ensuring public health and safety, and exceeding environmental standards.

WASTE TO RESOURCE - Regard the region's waste products as resources and minimize the amount of residual waste disposed.

COMMUNITY INVESTMENT - Contribute to healthy communities by providing recreation, education and sound land management.

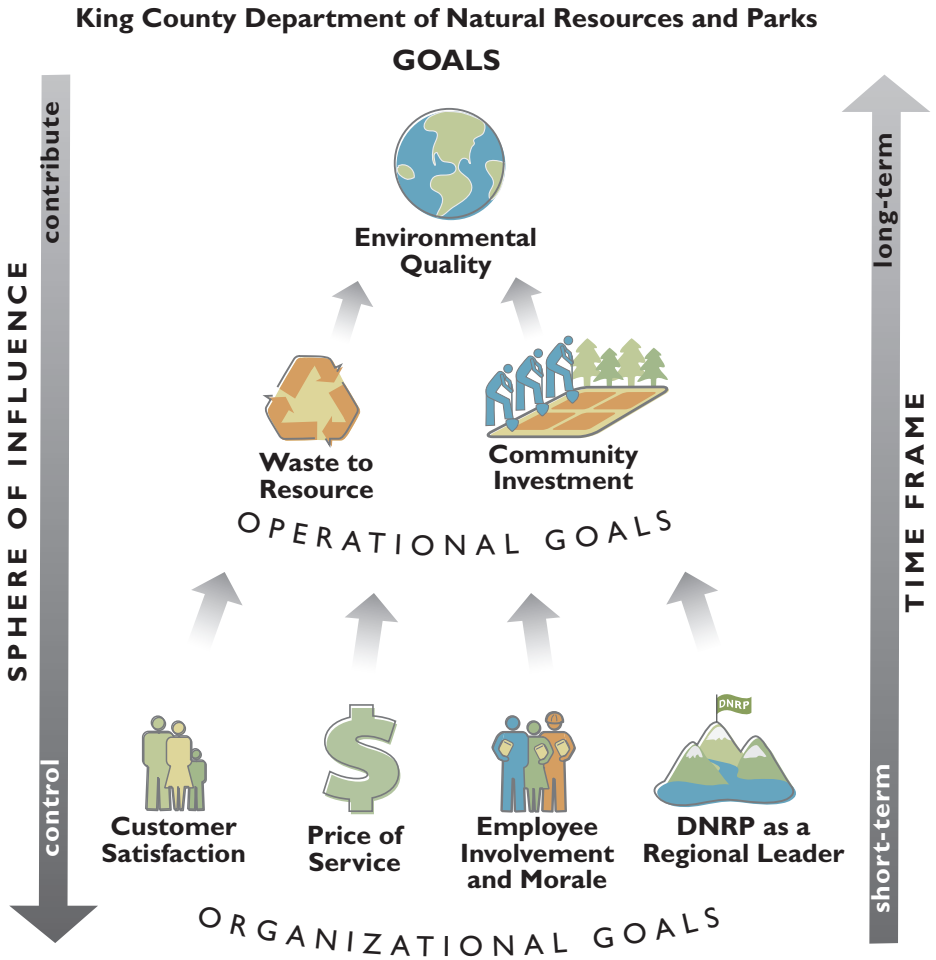
LEADERSHIP - Be a high performance regional environmental and resource management agency by providing high quality services, working in partnerships, and leading by example.

PRICE OF SERVICE - Price our services reasonably and competitively, while delivering the highest value to our citizens and maintaining safe and reliable systems.

CUSTOMER SATISFACTION - Meet the needs of our customers through valued, high quality and responsive services.

EMPLOYEE INVOLVEMENT AND MORALE - Be a forward thinking workforce where employees are engaged in our business, involved in decisions that affect them and understand their role in achieving the DNRP vision.

We have organized the **seven goals** to show how they relate to each other, how some goals are likely to take longer to attain, and how we have varying amounts of control over each goal.



Outcomes and Measures

Specific outcomes were developed based on the seven departmental goals. Each outcome is a statement of a desired condition in people, the organization, the community or the environment. Outcomes come in many forms, addressing many levels of change: from individual program outcomes focused on what a single program can achieve, to agency outcomes, and even community outcomes that result from an entire community's efforts. Many of the departmental outcomes in this report are agency-level outcomes, meaning that they require the combined efforts of more than one specific program to be attained. The environmental outcomes, by and large, are focused on community-level change requiring the combined resources of DNRP, other departments within King County, many other jurisdictions, businesses, and individual residents.

Outcomes themselves are difficult to measure, so performance measures and indicators were developed to quantify how each outcome is being achieved. Some outcomes have a single measure; others have several measures to better reflect the complexity of elements contributing to a single outcome. We have reserved the use of "indicator" for measures related to environmental conditions, which are influenced by many factors. Because many forces other than DNRP programs influence indicators, they are not truly accurate measures of DNRP's performance. Still, these indicators are important to track in order to determine the overall condition of the environment we help manage. In contrast, the agency performance measures are designed to measure what DNRP is trying to accomplish as an agency (see "What is the Difference between an Indicator and a Performance Measure?" on the next page).

Performance measures help describe the effects of our work. This information is used to evaluate potential changes in service delivery and help establish an expectation for positive change. These measures provide insight into how DNRP can work more effectively and efficiently to achieve its mission and goals. The outcomes are critically important to employees, elected officials, residents, and the environment.

This report will continue to be produced annually. Appropriate adjustments and refinements to the measures, indicators and targets will be made over time. While we have tried to define measures and indicators so that they can be updated annually, we recognize at the onset that data for every measure or indicator may not be obtained each year, either because change in the measure is not likely to happen over that timeframe or the cost and level of effort required does not warrant annual data collection. Notes within each measure describe the frequency of data collection or other issues affecting changes.

WHAT IS THE DIFFERENCE BETWEEN AN INDICATOR AND A PERFORMANCE MEASURE?

This report distinguishes between indicators and performance measures. Why? Indicators and performance measures are both terms used to describe data associated with desired results or outcomes. However, the main difference between these two terms is the degree of control we have over them. Indicators measure the "state of" something, typically in the natural environment. Performance measures help us assess the effect of our programs.

For example, we measure water quality in Puget Sound. Although other factors, such as ocean conditions, other jurisdictions' or industrial discharges, and natural variability affect water quality, we measure ambient water quality and call it an indicator. However, water quality near the outfall would decline if we did not meet our discharge requirements, and due to the degree of influence we have on water quality at the outfall, we call the water quality near the outfall a performance measure.

Key differences between indicators and performance measures include:

ISSUE	INDICATOR	PERFORMANCE MEASURE
Degree of control	DNRP has less control or can only influence the indicator	DNRP has higher degree of control
Outside influences	More outside influences	Fewer outside influences
Achievement	Due to number of influences and nature of interjurisdictional response, may take longer to achieve	Due to degree of control and fewer influences, may be achieved in a relatively shorter timeframe
Reporting	Reported countywide in county Benchmark Report Reported by urban-rural or incorporated-unincorporated in DNRP report due to limited programmatic reach or impact	Reported only in DNRP report
Use	Ambient sites are used as indicators of the condition of the environment	Outfall sites are used as agency performance measures
Strategy	Requires other jurisdictions and organizations	DNRP may be able to attain by itself, or with limited additional assistance

However, both indicators and performance measures in this report do have some things in common. They both:

- Provide trend data that can be tracked and analyzed over time
- Are important to DNRP
- Are related to DNRP's programs
- Measure desired outcomes, rather than just outputs, and therefore DNRP does not have total control over their attainment.

As an agency, we are interested in the state of the environment and want to improve its condition and achieve specific outcomes. However, this report is not a comprehensive assessment of the King County environment. We are focusing our measurement efforts on indicators that measure conditions where our programs have either a potentially positive or negative influence. Other environmental conditions, such air quality, impervious area, or land uses, are not directly within our agency's purview. The following reports offer a broader look at environmental quality, indicator, and sustainability issues:

The State of the Nation's Ecosystems: Measuring the Lands, Waters, and Living Resources of the United States. The Heinz Center (*www.us-ecosystems.org/ecosystems/report.html*).

Draft Report on the Environment. U.S. Environmental Protection Agency (*http://www.epa.gov/indicators/*).

Cascadia Scorecard: Seven Key Trends Shaping the Northwest. Northwest Environment Watch (*www. northwestwatch.org/scorecard*).

State of the Sound 2004 and State of the Sound Report Card. Puget Sound Action Team (*http://www.psat.wa.gov/Publications/StateSound2004/State_Sound_base. htm*).

Georgia Basin-Puget Sound Ecosystem Indicators Report. Georgia Basin Ecosystem Initiative Coordination Office and Washington State Department of Ecology (*http://wlapwww.gov.bc.ca/cppl/gbpsei/overview/*).

King County Benchmark Report. King County (*www.metrokc.gov/budget/benchmrk*).

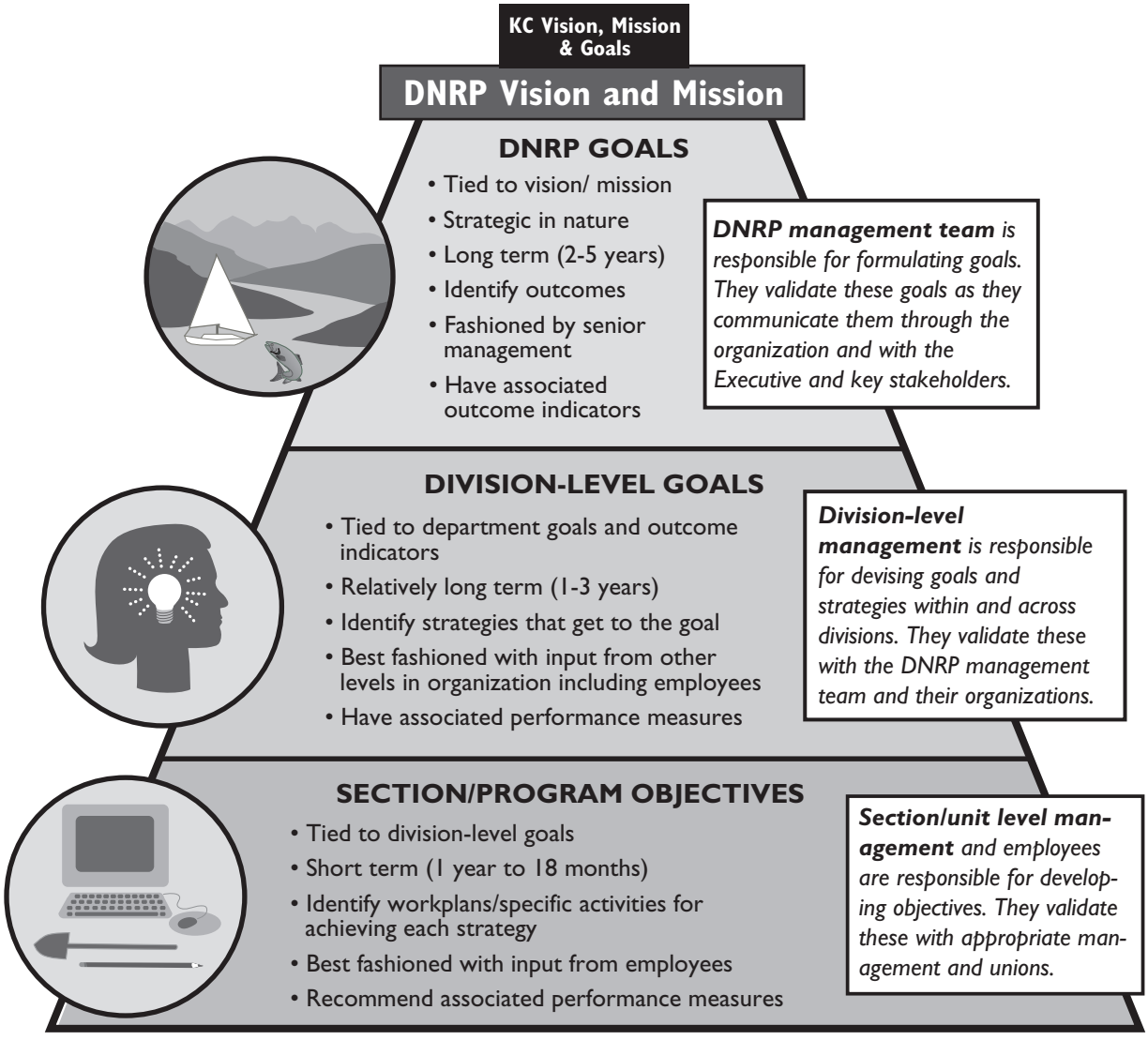
City of Seattle Environmental Action Agenda Targets/Indicators. City of Seattle(*http://www.seattle.gov/environment/Documents/eaa/2004_TargetIndicators.pdf*).

Divisions' Performance Management Approaches

Although this report focuses on department-wide goals and high level outcomes, each division within the department has its own business lines, organizational structure, and management objectives. Each division is best qualified to define the strategic approach appropriate for its work. As a result, the divisions have created performance management systems that fit within the broad departmental approach (see DNRP Performance Management Pyramid figure below). Each division uses their performance measures to drive decision-making and resource allocation. Measures with broader implications are evaluated at the department level.

Each division has developed a set of output, operational, efficiency, and outcome measures to track its progress and performance. Parks has a new weekly "dashboard" to track implementation of critical business plan strategy measures. SWD uses "OpStat" (short for Operations Statistics) to track a variety of daily and weekly measures related to effective and efficient operations at its transfer stations and the Cedar Hills landfill. WLR has a Performance Adaptive Management System that aligns quarterly outputs to the division's and department's goals. WTD has been using a Balanced Scorecard as part of its Productivity Initiative, to ensure the division maintains effective and safe operations despite attaining major cost savings over time.

DNRP PERFORMANCE MANAGEMENT PYRAMID



LEVERAGING RESOURCES: DNRP AND WASHINGTON STATE UNIVERSITY (WSU) KING COUNTY EXTENSION (KCE)

One way that DNRP maximizes the impact of every dollar spent is by partnering with other agencies to leverage resources from both organizations. King County Extension works in the two broad areas of 1) natural resource stewardship through its Water, Land, Forests, Farms, and Food (WLFFF) team and 2) youth and family stewardship through 4-H, Food $ense Nutrition Education, and Extension Family Nutrition Education programs. The WLFFF team combines the educational focus of WSU's mission with the goals of DNRP in part by using the same performance measures as DNRP. Through joint funding, a shared approach to measuring performance, and common goals, a true integration of services is possible.

Agriculture in King County: An Example of Program Integration

The citizens of King County have placed a high priority on maintaining agriculture production in King County by passing a levy to purchase the development rights of the best farmland, preserving it forever, and creating Agricultural Production Districts. To that end, DNRP has developed performance outcomes to ensure productive farms are maintained and managed in a sustainable manner (Performance Measures No. 28 and 30). Many programs and activities are needed to achieve these outcomes such as: ensuring new generations of farmers will farm the land, increasing consumer demand for local farm products, and managing land sustainably so it can be productive for generations to come.

KCE offers Washington State University's Cultivating Success Program – a three-part course series that helps new and existing farmers develop sustainable small-acreage farm enterprises. The first course in the series is an overview of sustainable farming designed to help new and transitioning farmers determine their goals and identify resources. Once students are clearer about their farming goals they are encouraged to take the next course on business plan development. Together these courses are meant to ensure farms are environmentally and financially sustainable. The final part of the Cultivating Success series is an on-farm training component, where participants are connected with successful local farmers to get on-the-ground experience. To help cultivate an appreciation for our King County farms and to create a market for local farm products, DNRP and KCE partner in presenting the Annual Harvest Celebration Farm Tour. Over the last six years, these tours have brought more than 18,000 visitors out to spend a day touring local farms. As part of a larger healthy food system initiative, KCE is developing a Farm-to-School Connections program that will bring locally grown produce into schools – providing kids healthy and fresh food options while expanding market opportunities for our local farmers.

Beyond Agriculture

The WLFFF team collaborates with DNRP in numerous other program areas, including horticulture, water quality, and forestry. KCE offers volunteer training (such as Master Gardeners), conducts on-site research, and provides technical assistance to home and landowners. The breadth and extent of this programming is possible because of the extensive leveraging of resources carried out by KCE faculty and staff.

- While King County provides 25 percent of the WLFFF team's operating budget, the remainder comes directly from WSU and from competitive grants.
- After factoring in in-kind contributions from other KCE collaborators and the value of hours donated by WSU trained volunteers, for every dollar King County provides to KCE, the KCE's WLFFF team returns nearly five dollars in services.

Together, DNRP and WSU KCE are building a strong approach to natural resource stewardship.

For more information about KCE, its programs, and educational classes, see *www.metrokc.gov/wsu-ce/*.

HOW WE EVALUATE OUR PERFORMANCE

Our goal is to use our performance management system like a "dashboard" in a car. We want to know: are we going in the right direction? how fast are we going relative to the speed limit? and is the engine close to overheating?

In order to evaluate our performance, we have developed five-year targets and long-term outcomes. The five-year targets were developed in 2002 and reflect where we want to be in 2007. The five-year targets were derived from staff and management expectations about what could be achieved in five years given expected levels of effort and funding, known program changes, and the impact of external factors such as population growth or changing revenues. These targets were designed based on current expectations with a stretch factor so that they are meant to be "realistic, yet ambitious." After 2007, new targets will be developed for 2012 and so on. Targets may also be adjusted upwards if we achieve the 2007 target early.

The long-term outcomes reflect a very long-term vision of what staff and management thought would represent the department's long-term, ultimate success. These represent extremely ambitious achievements, especially given the impacts from population growth and economic pressures in the region. For example, regulatory compliance or 100 percent attainment are clearly desired outcomes. In many cases, however, the optimal percentage is not 100 percent but a lower figure based on benchmark data, strategic planning documents, a regulatory guideline, or standard.

For each measure or indicator, we have current data, a 2007 target, and a long-term desired outcome. To aid in our measurement, we have created ratios, or percentage scores, for each measure based on how the current results or performance compares with either the target or outcome. These performance-to-target (P/T) and performance-to-outcome (P/O) ratios form the basis for our assessment.*

$$\frac{\text{PERFORMANCE}}{\text{2007 TARGET}} \times 100 = \text{2007 TARGET PERCENTAGE} \qquad \frac{\text{PERFORMANCE}}{\text{OUTCOME}} \times 100 = \text{OUTCOME PERCENTAGE}$$

Keeping with the driving metaphor, and using a system based on our performance management software, pbviews™, we have assigned colors to these ratios.

- **Green** indicates that we are meeting the target or outcome. Green is used only when the performance to target (or outcome) ratio equals 100 percent.
- **Yellow** indicates that we are not yet meeting the target or outcome.
- **Red** indicates that the measure or indicator needs attention. Red is used when the performance to target (or outcome) ratio is below a critical percentage or threshold value, determined on a case-by-case basis.

Given that our approach to performance management is to iteratively re-evaluate our progress and expectations, we may improve our measures, indicators, or targets based on new information, the trends in the indicators, and performance results.

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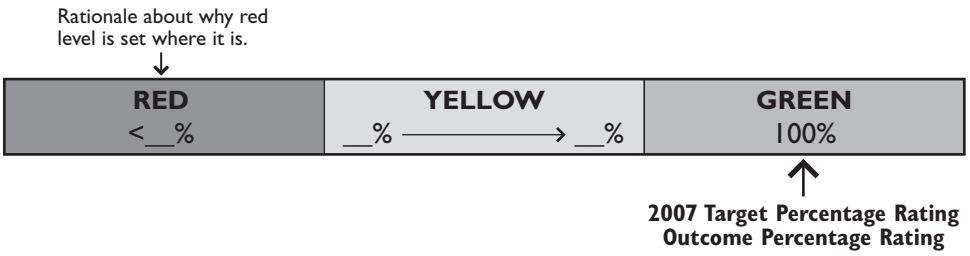
*For measures where low values are good (such as *reduction targets* or *not to exceed targets* as in measures Nos. 3 and 23), we use the following formula:

Index = 100-(((Current results-reduction target)/reduction target)*100)

Rating Chart Explanation



HOW WE USE THE MEASURES

Bob Behn, of Harvard's Kennedy School of Government, has identified eight purposes that public managers have for measuring performance: *

Evaluate How well is my agency performing?

Control How can I ensure that my subordinates are doing the right thing?

Budget On what programs, people or projects should my agency spend the public's money?

Motivate How can I motivate line staff, middle managers, non-profit and for-profit collaborators, stakeholders, and citizens to do the things necessary to improve performance?

Promote How can I convince political superiors, legislators, stakeholders, journalists, and citizens that my agency is doing a good job?

Celebrate What accomplishments are worthy of the important organizational ritual of celebrating success?

Learn Why is what working or not working?

Improve What exactly should who do differently to improve performance?

DNRP is using performance measure information in many of these ways and making efforts to improve our use of measurement information throughout the organization. DNRP recognizes that some uses, such as "promote" and "control," are easier to do than others, such as "budget" and "learn."

Departmental and divisional performance measures continue to inform the department's operations and planning efforts in a number of ways:

- As key information to inform each division's strategic business planning process,
- As operational information to ensure the department and divisions are meeting effectiveness and efficiency performance targets,
- As a structured way for the agency to understand its complex mission and intersecting program areas,
- As a key reporting effort for the department's management, the county's budget office, and elected officials to assess progress towards key outcomes and operational milestones.

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* Robert D. Behn. 2003. *Why Measure Performance? Different Purposes Require Different Measures*. Public Administration Review. Vol. 63, No. 5.

In addition, each divisional strategic business plan has included a set of core performance measures that are used to track each success in implementing the plans. Thus, performance measurement information is being built into each division's efforts to retool and improve for the future.

TABLE OF MAJOR CHANGES FROM 2003 REPORTING PERIOD

Measure or Indicator	**Change Made**	**Rationale**
No. 2	The measure was changed from "Percent of Satisfactory Health Inspection Reports for Solid Waste Facilities" to "Percentage of Health Department inspection reports that do not result in a notice of violation for Solid Waste Facilities."	The new measure is more effective in showing if performance at a facility is not adequate and warrants attention.
No. 3	The baseline for greenhouse gas calculations has changed (reduced) since the last report.	An updated and corrected baseline was calculated in 2004 based on new protocols.
No. 6	Changed the technical basis of the indicator and measure from enterococcus bacteria to fecal coliform bacteria.	Washington State Department of Ecology recently decided to continue to use fecal coliform as the standard for marine waters.
No. 13	Baseline Water Quality Index percentages were recalculated	The 2001-2002 water year data were recalculated based on new methodology being used by the Washington Department of Ecology.
No. 17	The indicator was changed from "Trend in native salmonid abundance" to "Percent of salmonid recovery targets achieved" and was rated for the first time.	The indicator could be created based on newly created regional salmon recovery targets.
No. 30	The measurement basis changed from "acres within the Rural Forest Focus Areas" to "acres in the rural area and the Forest Production District owned by non-industrial private forest landowners."	The adoption of the Critical Areas Ordinance allows forest landowners to develop forest stewardship plans or rural stewardship plans. As a result, more of the work of the Forestry Program is focused on assisting landowners meet these regulatory needs.

With the exception of division directors, performance measures are not used in personnel performance appraisals to evaluate individual employees. However, employee-specific work plans are expected to show a relationship to organizational business plans and their related measures.

Measure or Indicator	Change Made	Rationale
Nos. 32, 33, & 34	Changed data collection from unique, division-specific, and biannual data collection efforts into a standardized, annual online survey.	In addition to using a more standardized and consistent methodology among the divisions, the online survey is also more efficient to implement.
Nos. 32, 33, & 34	Changed the specific measurement basis from percentages to ratings.	Based on the new methodology, the measures were changed to a rating on a 1-5 scale (5 is high).
No. 37	Changed shorthand title of measure from "Efficiencies" to "Cost Savings."	Modified title of measure to better reflect focus on cost savings through various means, including efficiencies.
No. 39	Added a new multi-part measure on divisional efficiencies.	An external peer-review of the 2003 Measuring for Results report indicated that the report should include efficiency measures.
No. 40	Deleted two measures related to programs in the Water and Land Resources Division.	The Water Quality Education Program was eliminated in 2004 due to the division's business planning process. The Naturescaping Program does not represent a significant portion of the division's work to be represented as a "divisional" measure.

ENVIRONMENTAL QUALITY

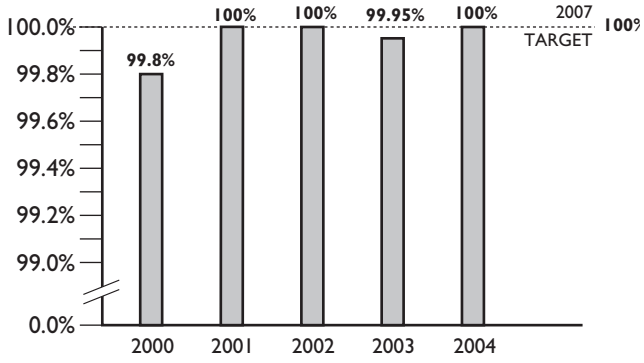
Percent compliance with permit limits for the major wastewater treatment plants

1

ABOUT THIS PERFORMANCE MEASURE

The National Pollutant Discharge Elimination System (NPDES) requires effluent permit limits for point source discharges. Under this system, King County's major wastewater treatment plants, West Point and South, are required to comply with a variety of effluent limits. This measure tracks violations of NPDES permit limits for biochemical oxygen demand, total suspended solids, fecal coliform counts, total residual chlorine and pH. This measure tracks one of DNRP's major environmental regulatory compliance issues.

Percent compliance with NPDES limits for wastewater treatment plants



OBSERVATIONS

In 2004, both major plants achieved their 100 percent compliance targets and earned Association of Metropolitan Sewerage Agencies' (AMSA) Gold Awards. The AMSA "Gold Award" requires 100 percent compliance for a calendar year. The AMSA "Silver Award," for five or fewer violations in a year, is the national industry benchmark. The AMSA "Platinum Award" requires 100 percent compliance for five consecutive years and is considered exceptional performance. Once achieved, a facility must achieve five consecutive years of 100 percent compliance before again qualifying for the "Platinum Award." This is very difficult to achieve due to the amount of equipment involved, weather variations, and the sheer number of opportunities for "failures."

These results were an improvement from 2003 when South Plant experienced a compliance rate of 99.95 percent compliance rate due to startup of an interim hypochlorite facility (hypochlorite replaced more dangerous chlorine). Modifications to this interim facility in late 2003 and early 2004 allowed South Plant to drastically reduce hypochlorite use while reliably meeting permit conditions.

The Washington State Department of Ecology issued new NPDES permits to both plants in 2004. South Plant's limits remained the same while West Point's limits included more stringent chlorine residual requirements, a technical switch to carbonaceous biological oxygen demand limits from total biological oxygen demand, and the

addition of a minimum percent removal requirement for total suspended solids and biological oxygen demand during wet weather.

The current 2007 target applies only to the two major facilities because King County's smallest treatment plant, Vashon, has recently undergone an extensive "make-over" with additional major renovations planned for the future. Staff needed additional data on the improved facility to develop a baseline. Starting in 2005, WTD has set an interim target of 98 percent compliance at Vashon. Performance against this target will be reported in the 2005 report.

OUR STRATEGY

All WTD sections have strategies aimed at ensuring success for their part of NPDES compliance. Specific strategies include a wide range of activities, such as: performing preventive maintenance; providing employees with training and tools; comparing new facility designs with existing facilities; using criteria such as product quality, operations and maintenance and life cycle costs to evaluate plans; developing asset management plans for major equipment maintenance or replacement; providing timely response to project requests that will prevent exceedances; maintaining a highly skilled Process Control staff whose responsibility is to monitor and analyze plant performance to develop control set points which ensure permit compliance while minimizing treatment costs; providing a coordinated NPDES program, including a dedicated staff person overseeing NPDES permit negotiations; providing a "key manhole" industrial sampling program to track down midnight dumpers; and, ensuring all staff are up-to-date on requirements.

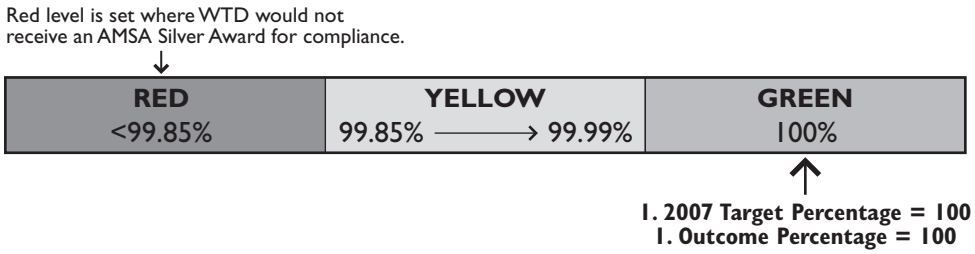
RATING

Results, Target and Outcome

2004 Results: 100 percent
2007 Target: 100 percent
Outcome: 100 percent

The expectation for performance is 100 percent compliance with state and federal regulations.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

WTD's Balanced Scorecard Report; reports by Process Control Supervisors.

Percentage of Health Department inspection reports that do not result in a notice of violation for solid waste facilities

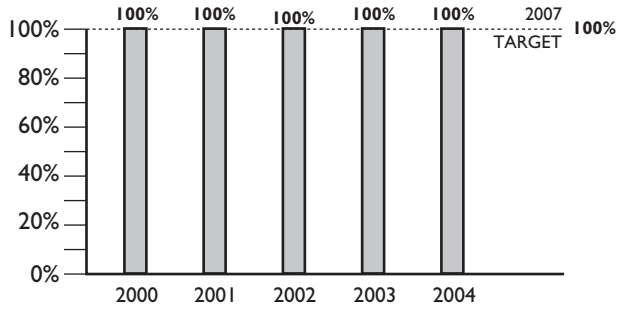
2

ABOUT THIS PERFORMANCE MEASURE

SWD has responsibility for the Cedar Hills Regional Landfill, eight transfer stations, two rural drop box facilities, and 10 closed landfills. Both federal and state regulations govern solid waste handling and disposal, although these regulations delegate authority to local health districts. Public Health - Seattle & King County issues operational permits for the landfills, transfer station and drop box facilities. These permits require that the division develop, submit for approval, and comply with facility plans of operation. They also require monitoring and reporting on numerous emission and discharge performance standards. In addition, the division monitors groundwater, surface water, wastewater and gas at the closed landfills.

Inspections are routinely conducted on a weekly, monthly or quarterly basis for all of the divisions' facilities including active and closed landfills and transfer stations and drop boxes. Collectively, there are on average about 256 inspections conducted on SWD facilities per year. Inspections include examinations of the stormwater ponds, leachate collection systems, gas collection systems, and access roads for litter, odors, damage, spills, seagulls and other vectors. Inspections can inform the division of unsatisfactory practices or situations that warrant attention. If an unsatisfactory designation is received, the division must address the concern or else a Notice of Violation can be administered. This measure reflects an ongoing composite of the monitoring and reporting results.

Percent of Health Department
inspections with no notices of violations



OBSERVATIONS

Last year, "Percent of Satisfactory Health Inspections Reports" was used to measure performance at solid waste facilities. It has been determined that this measure does not sufficiently characterize the performance of division facilities from a public and an environmental safety standard. For example, an unsatisfactory finding does not necessarily indicate an imminent environmental problem. It does indicate a condition the inspector believes needs correction. A more pertinent measure is based on Notices of Violation. A Notice of Violation occurs if an issue identified by the inspector is not corrected in a timely manner. This is a clear indication that performance at a facility

is not adequate and warrants attention. Since 2000, none of the Health Department's inspection reports have resulted in a Notice of Violation.

OUR STRATEGY

This performance measure has been included in the 2004 Solid Waste Business Plan although revised slightly as described above. Monitoring and maintaining air emissions and water discharges in accordance with local state and federal standards is ongoing work. All programs to ensure compliance will continue and will be fully funded and staffed in 2005.

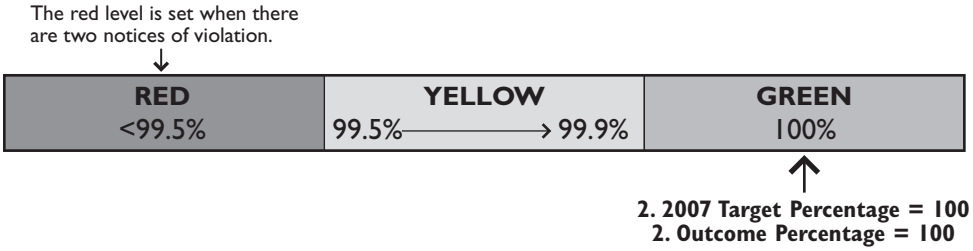
RATING

Results, Target and Outcome

2004 Results: 100 percent
2007 Target: 100 percent
Outcome: 100 percent

The expectation is 100 percent of inspection reports will not result in a Notice of Violation from Public Health - Seattle & King County.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

SWD, Engineering Services Section, Landfill and Environmental Monitoring Unit.

OUTCOME: DNRP operations protect public health and the environment

Total greenhouse gas emissions from DNRP facilities

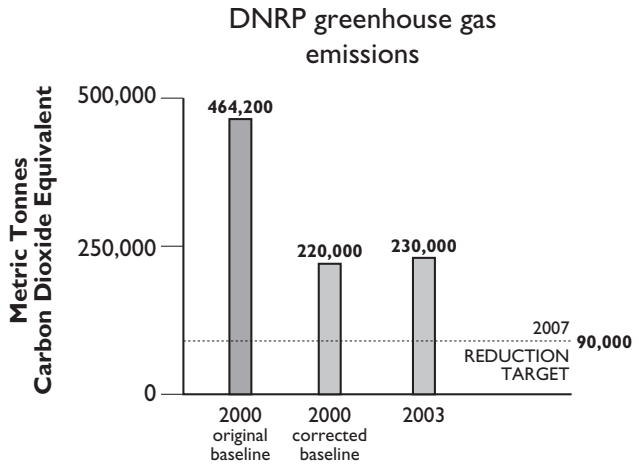
3

ABOUT THIS PERFORMANCE MEASURE

Greenhouse gases are produced primarily from burning fossil fuels. Additional sources include decomposing waste and synthetic chemicals. These combined emissions are presumed to be the source of global warming. Reducing greenhouse gas emissions is a priority in order to limit the potentially catastrophic damage from global warming.

Increased greenhouse gas concentrations cause more than global warming: in the Pacific Northwest, scientists expect to see significant changes in the amount of winter snowpack, earlier spring snow melt, and less water in reservoirs and rivers during summer. Sea levels will continue to rise. Many of the multiple stresses already exerted on salmon are likely to be exacerbated by warmer summer temperatures and lower summer streamflow.

Greenhouse gas emissions from DNRP operations are primarily from municipal solid waste facilities, wastewater treatment plants, and power production required to operate treatment plants and other DNRP facilities. This measure includes both direct emissions, those that are emitted directly from facilities or vehicles, and indirect emissions associated with energy purchases. This measure allows DNRP to tracks its greenhouse gas emissions and target reductions through the use of new technology, process alterations, or energy sources with lower emissions. In addition, greenhouse gas reduction can also serve as a proxy for energy and fiscal efficiency. Metric Tonnes Carbon Dioxide Equivalent ($MTCO_2e$) is a common unit for quantifying releases of various greenhouse gases.



OBSERVATIONS

In 2002, King County government evaluated its total emissions in 2000 and estimated them to be approximately 600,000 $MTCO_2e$. This number has been substantially revised to approximately 400,000 $MTCO_2e$. There are two principal reasons for the large revision of the previous 2000 inventory:

1. Carbon dioxide (CO_2) emissions from the existing Cedar Hills landfill flare should not have been counted in the previous inventory. The consensus from the majority

of GHG accounting protocols presume that absent landfills, human-generated solid waste would naturally biodegrade and create aerobic CO_2 emissions. The CO_2 emissions from the flare are the same as would have occurred without the landfill. However, landfills do create anaerobic methane (CH_4) which is part of the GHG emissions inventory. If the methane is flared and subsequently converts to CO_2, it is not included in the inventory. Because of the size of Cedar Hills, there still is an enormous amount of methane that escapes, is not flared, and therefore is counted as a direct emission. This difference in GHG inventory accounting methods accounts for the majority of changes to the 2000 inventory.

2. Secondly, instead of using "national-average" calculations for emissions from DNRP's wastewater treatment plants, calculations from a case study of similar treatments plants was used in place of the national average. This case study is more likely to reflect the county's actual emissions compared to the national average.

In 2005, DNRP will update the 2003 inventory with new data from 2004. However, the methodologies are unlikely to change.

The updated inventory for 2003 has included the most up-to-date calculations and protocols for estimating GHG emissions. The new 2003 total county estimate is approximately 420,000 $MTCO_2e$, up approximately 20,000 $MTCO_2e$ from 2000. While that amount represents only 1.5 percent of the emissions within the geographic boundaries of the county, it makes King County government one of the larger single-entity emitters.

Of the county government's total emissions, approximately 55 percent (or 230,000 $MTCO_2e$) comes from DNRP operations, primarily because of the Cedar Hills landfill and from powering the wastewater treatment facilities. The slight increase in 2003 from the corrected 2000 baseline figure reflects increases in general electric use by our facilities and increased solid waste amounts from county residents and businesses disposed at Cedar Hills landfill.

OUR STRATEGY

The county has long-standing plans to convert Cedar Hills' landfill gas to electricity (see Measure No. 21) and to upgrade the infrastructure at the existing wastewater treatment plants to generate additional electricity from treatment process-produced methane. These major capital improvements will provide significant offsets to DNRP's emissions inventory, perhaps as much as 160,000 $MTCO_2e$ in reductions. GHG reductions are one part of the justification for these capital improvements. Fundamentally, this use of waste-to-resources makes strong economic sense in addition to their strong environmental attributes.

As part of the 2003 GHG inventory, a long list of additional potential GHG reductions has been identified. However, the potential for achieving these addition reductions is somewhat limited. The most promising reductions that have been identified thus far are increases in the use of biodiesel fuel (already being used in Solid Waste Division's fleet as of January 2005) and increased use of cement substitutes in capital projects.

Although new technology and improved engineering can reduce some emissions from DNRP facilities, once the new energy facilities are up and running major additional reductions in DNRP's GHG emissions is unlikely. For example, Cedar Hills is a very well managed landfill and already captures more fugitive methane than most similar facilities. To expect greater capture than is already being attempted is not cost effective.

Likewise, to capture fugitive methane emissions at the wastewater treatment facilities is also unlikely without extraordinary capital retrofits. For example, buying emission reduction credits would be far more cost effective than attempting to retrofit the treatment processes at the South Plant that allows fugitive methane emissions.

RATING

Results, Target, Outcome

2003 Results: 230,000 $MTCO_2e$

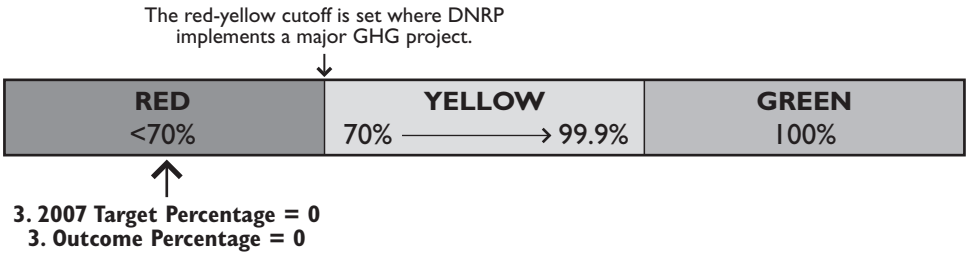
2007 Target: 90,000 $MTCO_2e$

Outcome: 0 $MTCO_2e$

The previously published 2007 target (304,300 $MTCO_2e$) reflected the older 2000 emissions inventory and its methodology. The new target, based on the corrected baseline, also takes into account the projects that we are planning to accomplish by 2007.

There is no commonly agreed upon benchmark that can be used as a long-term outcome. However, most scientists agree that in order to stabilize the climate from current impacts generated by greenhouse gas emissions, then the United States would have to reduce its emissions by 60 to 80 percent below 1990 emissions levels. DNRP will base its success upon what is needed to protect the environment from the potential impacts from global warming and therefore the long-term outcome is set at zero net emissions. This number will continue to be evaluated in terms of new scientific findings.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCES

King County Clean Air Library (*http://dnr.metrokc.gov/dnrp/air-quality/*); 2003 Inventory of King County Air Emissions, Revision D – 28 December 2004 (*http://dnr.metrokc.gov/dnrp/air-quality/inventory.htm*).

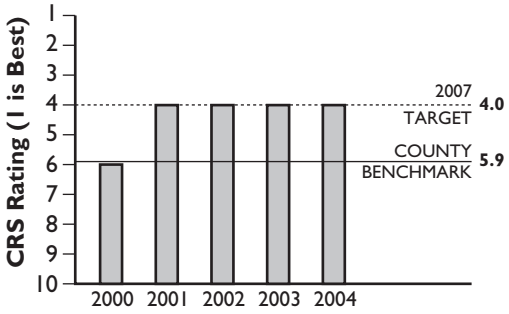
4 King County's annual flood safety rating score

ABOUT THIS PERFORMANCE MEASURE

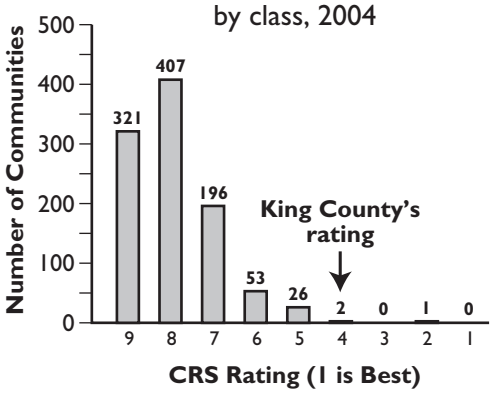
The National Flood Insurance Program's Community Rating System (CRS) is a federal program for recognizing and encouraging community floodplain management activities that exceed minimum national standards. There are 19 activities organized under four main categories (Public Information, Mapping and Regulation, Flood Damage Reduction, and Flood Preparedness) recognized by the CRS as appropriate measures for eliminating exposure to floods. Credit points are assigned to each activity and these points are rolled into an overall score from 1 to 10, with 1 being the highest.

Based on this rating, individual flood insurance premiums are adjusted to reflect the reduced flood risk in the county. The CRS also encourages programs and projects that preserve or restore the natural state of floodplains and protect these functions. The CRS encourages communities to coordinate their flood loss reduction programs with Habitat Conservation Plans and other public and private activities that preserve and protect natural and beneficial floodplain functions.

4a. King County's CRS rating



4b. CRS communities by class, 2004



OBSERVATIONS

As of Oct. 1, 2004, there were 1006 participating CRS communities (both cities and counties). No communities received a class "1" ranking, one community received a class "2" ranking, and two communities, including King County, received a class "4" ranking. This puts King County in the top one percent of all participating communities and makes it the highest rated county in the nation for its floodplain management program and services. The resulting flood insurance premium reduction in Special Flood Hazard Areas is 30 percent annually for policyholders in unincorporated King County. The 30 percent savings translates to a savings of $240,900 annually for King County policyholders.

For a more local comparison, the average score for all participating Washington counties is 5.9 and the average score for all participating Washington counties and cities is 6.6. Since this scale uses "1" as the best, a lower number means a better outcome.

OUR STRATEGY

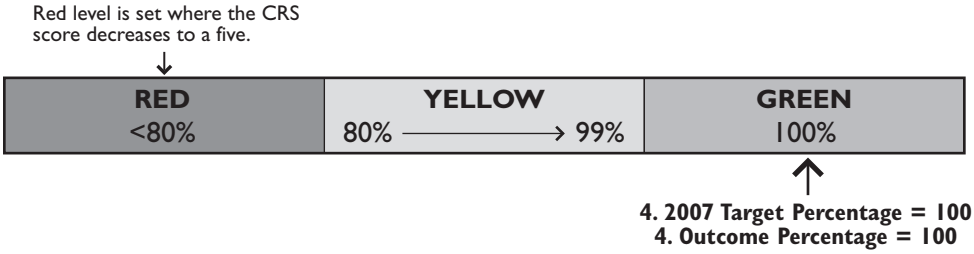
King County will ensure annual CRS certification reviews by the Insurance Services Office and the Federal Emergency Management Agency (FEMA) are comprehensively organized and prepared and will provide prompt and complete follow-up for any outstanding issue identified in the review. King County will work with FEMA Region 10 and CRS task force representatives on CRS credit allowance for flood hazard code implementation, local drainage maintenance standards for streams with Endangered Species Act-listed salmonids, and on the countywide Flood Hazard Reduction Plan updates. King County will integrate changes to the flood hazard and channel migration hazard codes into the county's CRS certification package in the next round of CRS Program re-verification. King County will also coordinate updating the Flood Hazard Reduction Plan with the Office of Emergency Management's development of the King County All Hazards Plan to ensure these plans will meet the most current policies and standards of the CRS Coordinators Manual which will optimize CRS credit points.

RATING

Results, Target and Outcome

2004 Results: 4 CRS Rating
2007 Target: 4 CRS Rating
Outcome: 4 CRS Rating

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP's Flood Hazard Reduction Services; *www.fema.gov/nfip/crs.shtm*.

OUTCOME: Marine water and sediments are healthy for humans and aquatic species

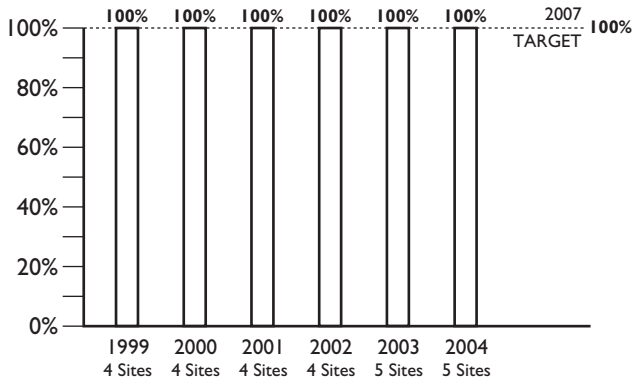
5 Percent of monitored, offshore marine sites that meet the state water quality standard for fecal coliform bacteria

ABOUT THIS ENVIRONMENTAL INDICATOR

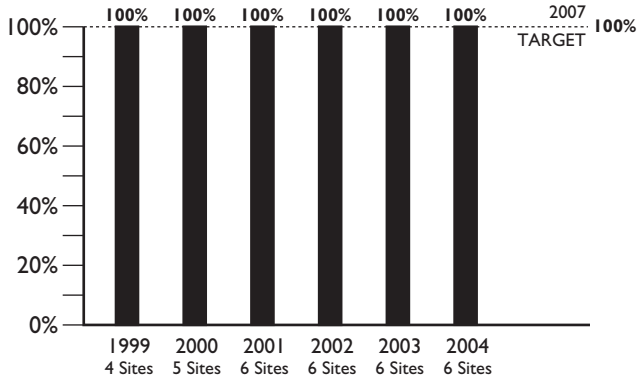
The presence of fecal coliform bacteria in aquatic environments indicates that the water has been contaminated with the fecal material of humans, birds, or other warm-blooded animals. Fecal coliform bacteria may enter the aquatic environment from household or farm animals, wildlife, stormwater runoff, untreated wastewater effluent and failing septic systems. Although these bacteria themselves are usually not harmful, they often occur with other disease-causing bacteria so their presence indicates the potential for pathogens to be present and be a risk to human health.

This standard addresses water quality requirements for classifying shellfish growing areas and for protecting primary contact recreational uses. For marine surface waters, the current standard is a geometric mean of 14 colony forming units (cfu)/100ml. Ambient sites are chosen to reflect general, or ambient, environmental conditions. Outfall

Percent of offshore sites that meet fecal coliform geometric mean standard in 100 percent of samples



5a. Ambient Sites



5b. Outfall Sites

sites are located at King County wastewater treatment plant outfalls and combined sewer overflow (CSO) outfalls operated by King County. The term "offshore" in this indicator refers to sites that are not classified as beach sites.

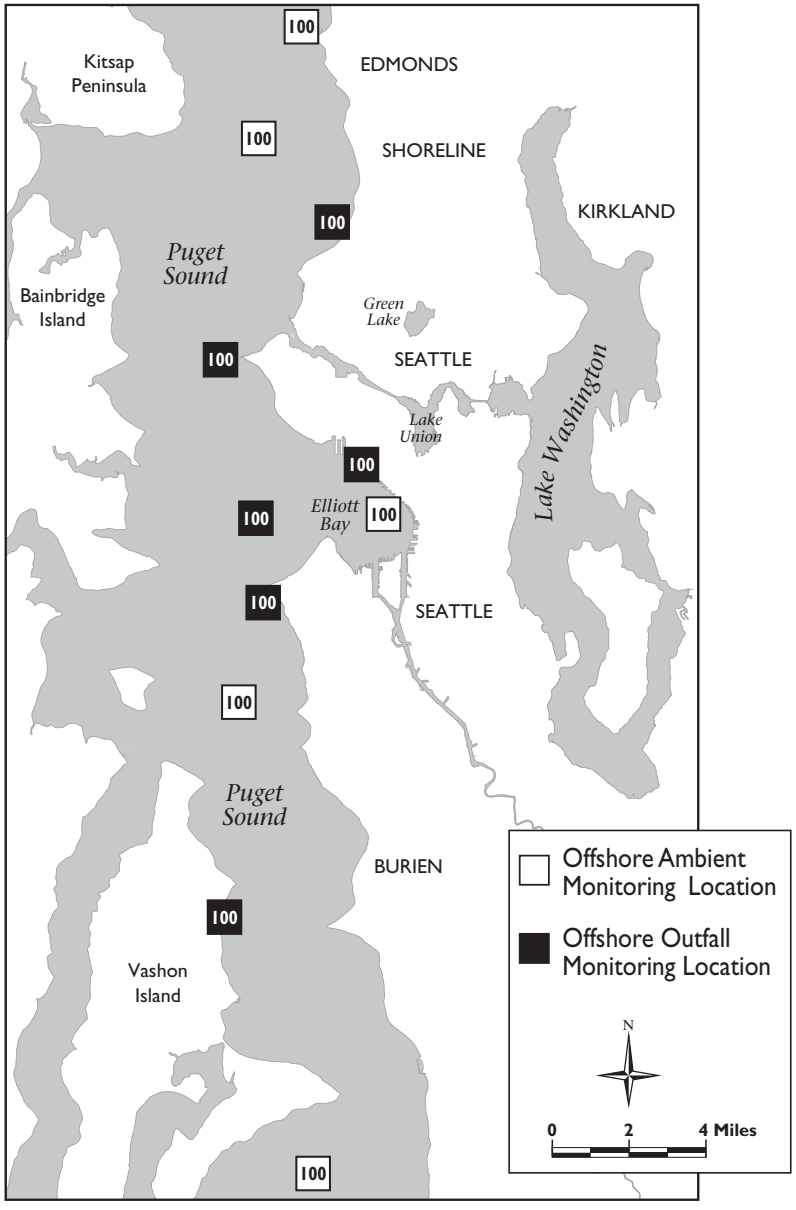
OBSERVATIONS

Ambient sites can be impacted by nonpoint source pollution, particularly in Elliott Bay. All ambient and outfall sites met the fecal coliform bacteria standard in 2004. Although these standards were met at all sites for the last five years, bacteria levels tend to be higher in Elliott Bay.

OUR STRATEGY

Outfall site results are being treated as an agency performance measure because if we stopped treating and transporting waste effectively, the bacteria levels could increase. DNRP's strategy to prevent any decline in the measure is to continue to operate our wastewater treatment plants and conveyance system effectively.

Percent of samples of each monitored site that met the fecal coliform bacteria standard



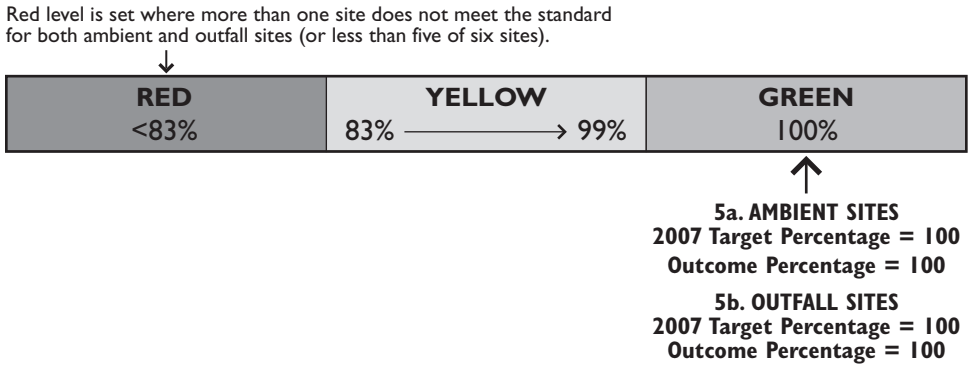
RATING

Results, Target and Outcome

5a. Ambient Sites		5b. Outfall Sites	
2004 Results:	100 percent	2004 Results:	100 percent
2007 Target:	100 percent	2007 Target:	100 percent
Outcome:	100 percent	Outcome:	100 percent

The 2007 target and long-term outcome for both ambient and outfall source sites is that no marine offshore sites exceed the marine surface water fecal coliform standard.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP's Science, Monitoring and Data Management Section.

OUTCOME: Marine water and sediments are healthy for humans and aquatic species

Percent of monitored marine beach sites that meet the state standard for fecal coliform bacteria

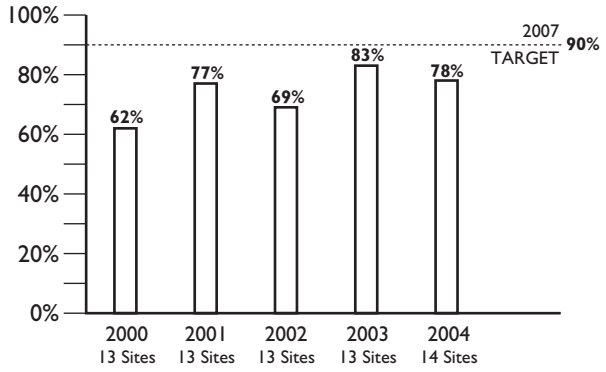
6

ABOUT THIS INDICATOR

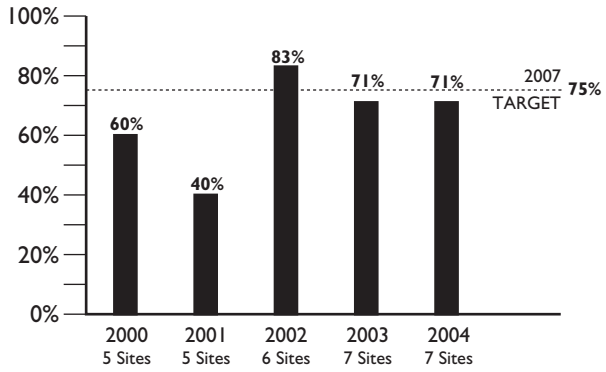
Fecal coliform bacteria are an indicator for the extent of fecal contamination of recreational surface waters. This performance measure was previously based on enterococcus bacteria, another indicator of fecal contamination. However, the U.S. Environmental Protection Agency (EPA) has excluded Washington State from the enterococcus-based National Beaches Rule. The decision to allow Washington State to use fecal coliform as the marine waters bacterial standard was largely based upon the dataset submitted by King County.

This bacterial standard addresses health effects from direct contact with the marine waters during activities such as swimming, wading, SCUBA diving, or surfing. The state bacterial standard is that the geometric mean of samples collected should not exceed 14 cfu/100ml. Outfall sites for the beach monitoring program are located in nearshore areas within close proximity to wastewater treatment plant outfalls and ambient sites are located in areas away from a direct outfall source.

Percent of beach sites that meet the fecal coliform geometric mean standard

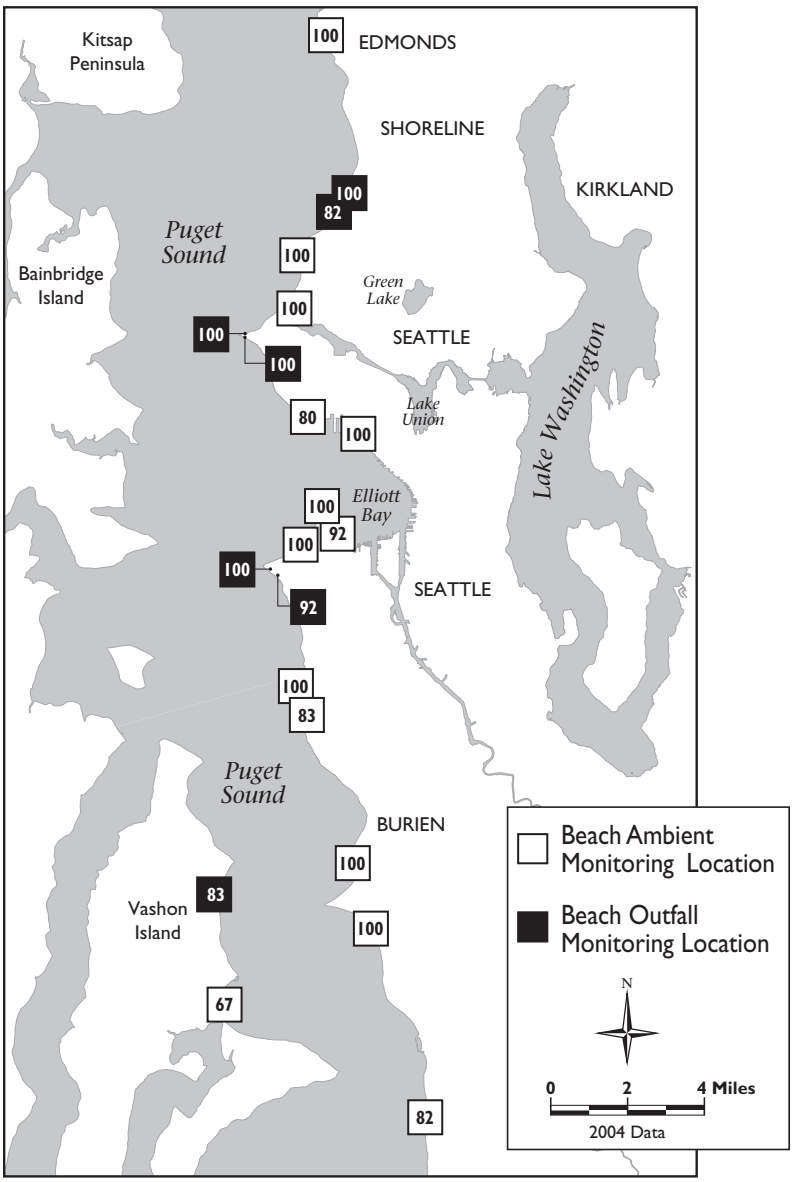


6a. Ambient Sites



6b. Outfall Sites

Percent of samples at each monitoring site
that met the fecal coliform bacteria standard



OBSERVATIONS

The 2007 target is based on recent data and may be optimistic as historical information indicates higher levels of bacteria are likely. King County is currently exploring the feasibility of conducting specialized sampling and analysis to assess the source of fecal coliform bacteria at several beaches that have consistently failed state standards.

OUR STRATEGY

Past efforts by King County have reduced bacteria from most outfalls to the point that contributions from nonpoint sources in the area are more significant than the outfalls themselves. The agency exerts little control on improving current levels of fecal coliform near most outfall sites. An exception to this is the Vashon outfall where recent improved maintenance and operations have reduced bacteria entering the environment and planned upgrades to the

outfall itself (including moving it further out into deeper water) should further reduce bacteria on nearby beaches, bringing us closer to our target.

Despite nonpoint contributions, the outfall site results are being treated as an agency performance measure because if we stopped treating and transporting waste effectively, the levels could increase even further. DNRP's strategy to prevent any decline in the measure is to continue to operate our wastewater treatment plants and conveyance system effectively.

RATING

Results, Target and Outcome

6a. Ambient Sites

2004 Results: 78 percent

2007 Target: 90 percent

Outcome: 100 percent

The long-term outcome is that no monitored beach sites exceed the fecal coliform guideline.

6b. Outfall Sites

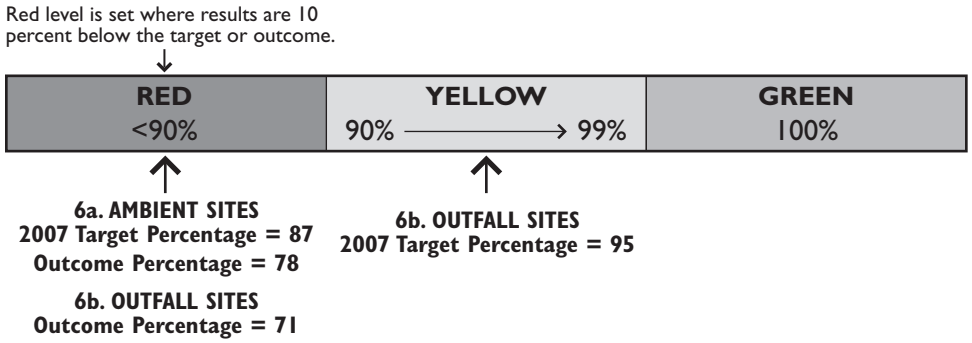
2004 Results: 71 percent

2007 Target: 75 percent

Outcome: 100 percent

The long-term outcome is that no monitored beach sites exceed the fecal coliform standard. The results for outfall sites are being treated as an agency performance measure due to the degree of control we exert on the outcome.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

Water and Land Resources Division, Science, Monitoring and Data Management Section.

OUTCOME: Marine water and sediments are healthy for humans and aquatic species

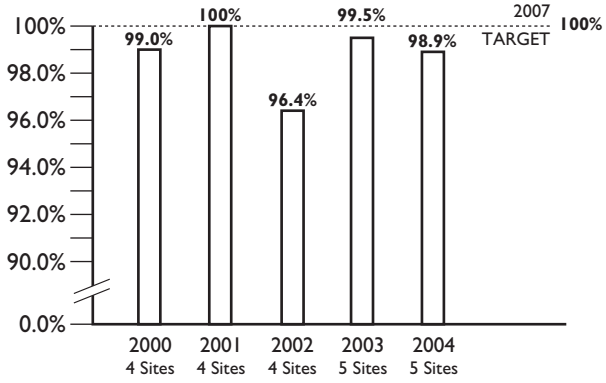
7 Percent of marine sites that meet standards and guidelines for dissolved oxygen

ABOUT THIS INDICATOR

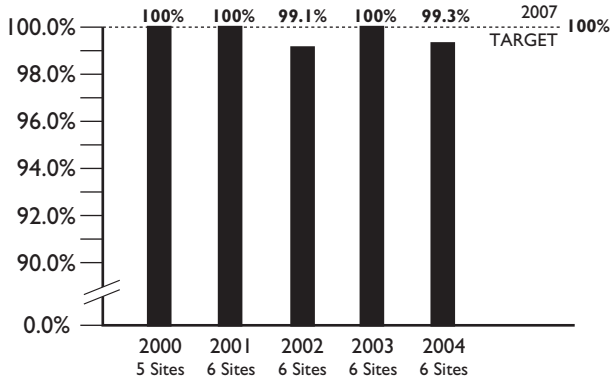
Dissolved oxygen is an important factor of overall water quality and plays an important role in the presence or absence of marine species. Aquatic plants and animals require a certain amount of oxygen dissolved in the water for respiration and basic metabolic processes. Marine waters that contain high amounts of dissolved oxygen are generally considered healthy ecosystems and are capable of sustaining various species of aquatic organisms, including sensitive fish and invertebrate species. Many factors influence dissolved oxygen concentrations in marine waters including natural seasonal variation and temperature. During winter, deep oceanic water from the Pacific Ocean containing naturally low levels of oxygen enters Puget Sound. Anthropogenic inputs, such as excess nutrients from stormwater runoff or wastewater discharges, can also negatively influence oxygen levels.

For Class AA marine surface waters, the current Washington State Water Quality Standard for dissolved oxygen is 7.0 mg/L. However, this standard of 7.0 mg/L is not met

Percent of King County samples that meet marine water quality guideline for dissolved oxygen (5.0 mg/L)



7a. Ambient Sites



7b. Outfall Sites

GOALS

Environmental Quality
Achieve a net gain in environmental quality by protecting and restoring the natural environment, ensuring public health and safety, and exceeding environmental standards

Waste to Resource

Community Investment

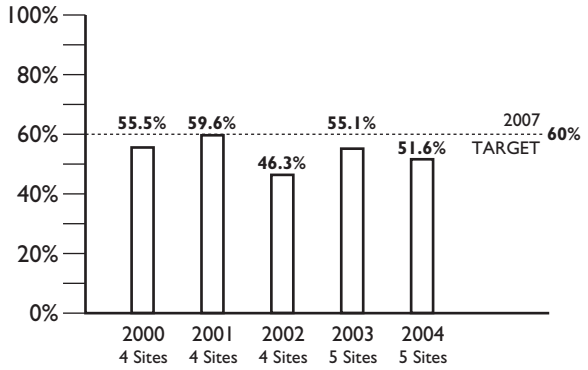
Leadership

Price of Service

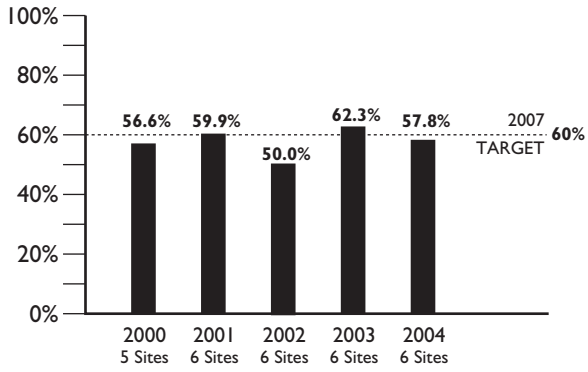
Customer Satisfaction

Employee Involvement and Morale

Percent of King County samples that meet marine water quality standard for dissolved oxygen (7.0 mg/L)



7c. Ambient Sites



7d. Outfall Sites

at all times of year, often due to naturally occurring conditions. Therefore, a guideline of 5.0 mg/L, below which aquatic life may be harmed, is used as a warning limit. Ambient sites are chosen to reflect general, or ambient, environmental conditions. Outfall sites are located near King County wastewater treatment plant outfalls, and combined sewer overflow and stormwater outfalls owned by the county and the City of Seattle.

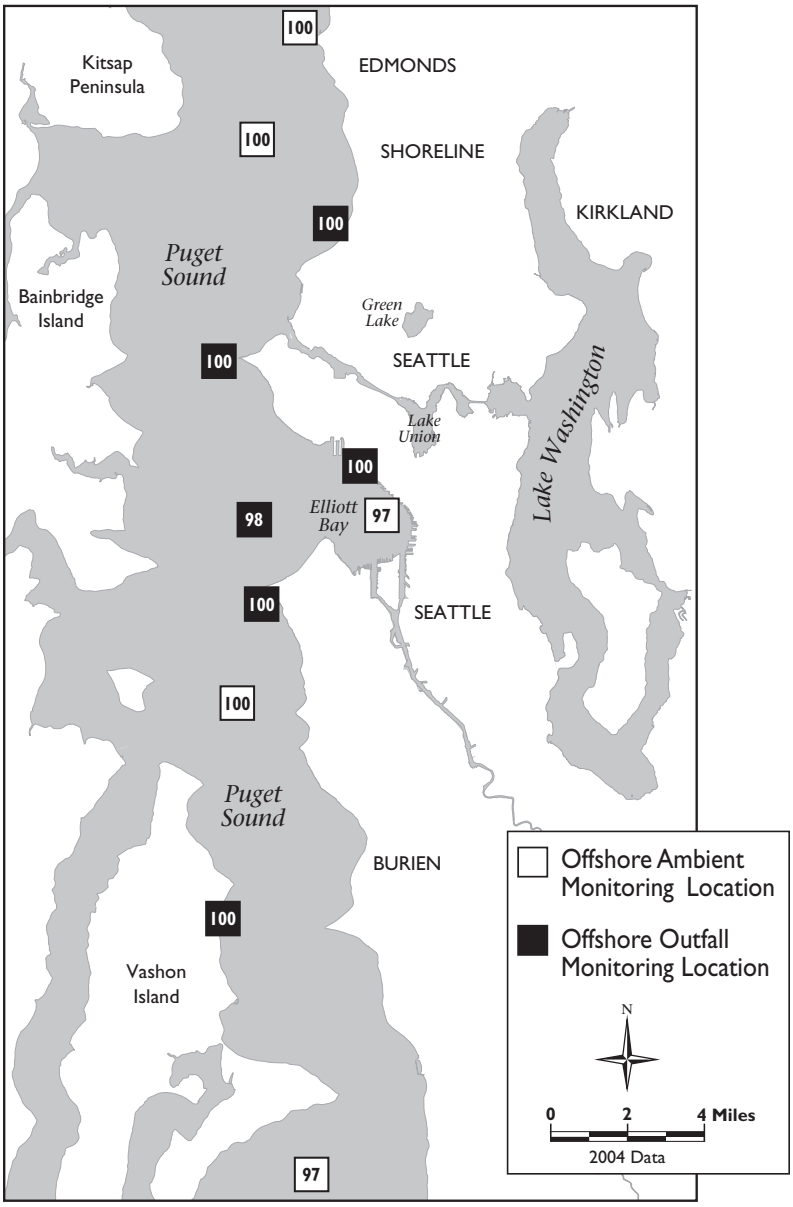
OBSERVATIONS

2004 findings indicate that dissolved oxygen levels in waters at both ambient and outfall sites are consistently above the 5.0 mg/L minimum dissolved oxygen guideline. However, dissolved oxygen levels in waters at both the ambient and outfall sites often fall below the 7.0 mg/L standard. Many of the values observed below the 5.0 mg/L guideline are seen at the Elliott Bay sampling location. This may be attributed to the influence of Duwamish River freshwater runoff. Dissolved oxygen levels below the guideline were also observed at the South Plant outfall station and southernmost ambient station.

At the 7.0 mg/L standard, little difference was observed between ambient and outfall sites, with a higher percentage of samples above the standard seen at outfall sites. This indicates that effluent from the outfalls is not affecting dissolved oxygen concentrations.

Dissolved oxygen data from January and February, 2004 were not used in the calculations due to a lowering (or downward) bias in the oxygen sensor measurements (when compared to lab results) in those months. Since historical dissolved oxygen lev-

Percent of samples at each monitoring site
that met the marine water quality guideline
for dissolved oxygen (5.0 mg/L)

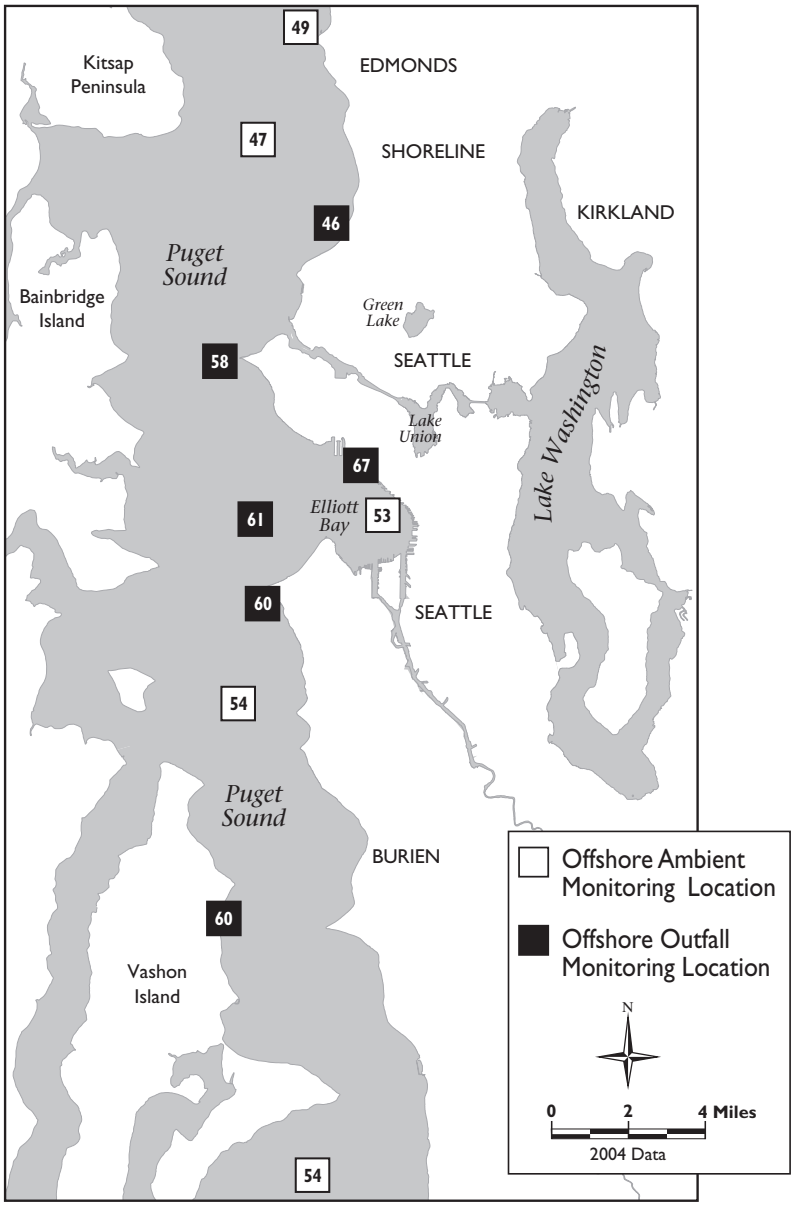


els in January and February tend to be greater than 7.0 mg/L at all locations, the final percentages of samples that meet both the guideline (>5.0 mg/L) and standard (>7.0 mg/L) are biased low due to the exclusion of these January and February data.

OUR STRATEGY

Due to ambient conditions, the agency can exert little control on improving current levels of dissolved oxygen. However, the outfall site results are being treated as an agency performance measure due to the potential of decreased oxygen levels if treatment and transporting of waste were to become ineffective. DNRP's strategy to prevent any decline in the measure is to continue to operate our wastewater treatment plants and conveyance system effectively.

Percent of samples at each monitoring site that met the marine water quality standard for dissolved oxygen (7.0 mg/L)



RATING
Results, Target and Outcome

7a. Guideline – Ambient Sites
2004 Results: 98.9 percent
2007 Target: 100.0 percent
Outcome: 100.0 percent

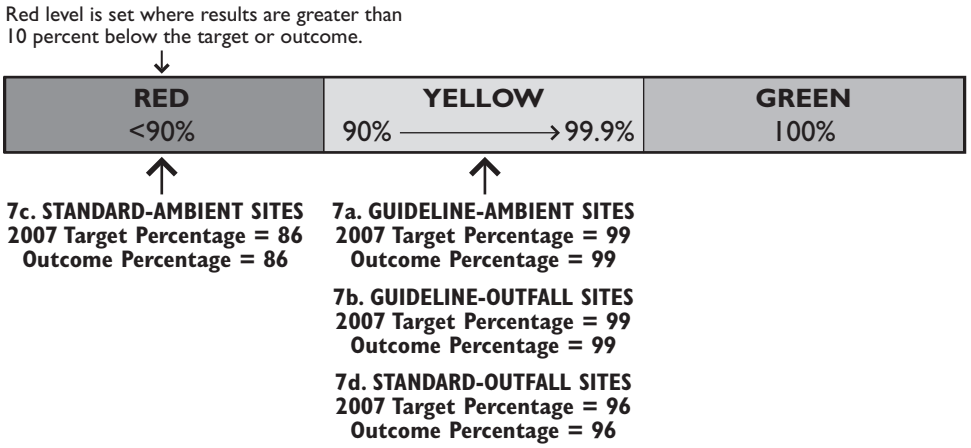
7b. Guideline – Outfall Sites
2004 Results: 99.3 percent
2007 Target: 100.0 percent
Outcome: 100.0 percent

The long-term outcome is that no marine water samples exceed, or drop below, the 5.0 mg/L guideline.

7c. Standard – Ambient Sites
2004 Results: 51.6 percent
2007 Target: 60.0 percent
Outcome: 60.0 percent
The target and outcome are based on long-term historical dissolved oxygen levels observed at these sites.

7d. Standard – Outfall Sites
2004 Results: 57.8 percent
2007 Target: 60.0 percent
Outcome: 60.0 percent
The long-term outcome is that dissolved oxygen levels at outfall sites are comparable to ambient conditions.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE
Water and Land Resources Division, Science, Monitoring and Data Management Section.

OUTCOME: Marine water and sediments are healthy for humans and aquatic species

Percent of marine sediment sites that meet state sediment quality standards

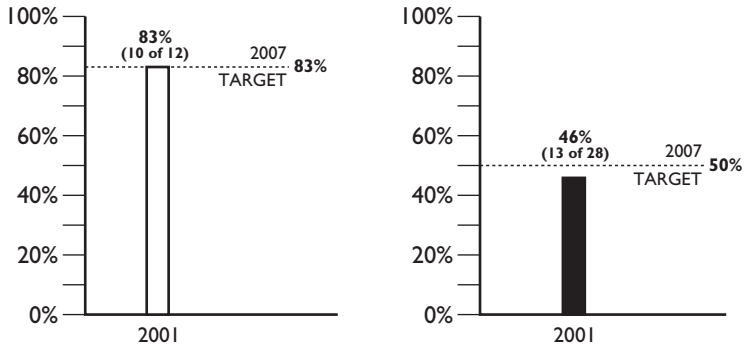
8

ABOUT THIS INDICATOR

Many pollutants found in the environment are not detected in water, but are attached to sediment particles. Once in the sediments, these pollutants can directly harm marine organisms or be reintroduced to the food chain through the organisms found in marine sediments. The purpose of the Washington State Sediment Management Standards is to reduce and ultimately eliminate adverse effects on biological resources and any significant human health risk from surface sediments in marine, low salinity or estuarine, and freshwater environments.

The Sediment Quality Standard (SQS), or "no adverse effects level," is the most protective chemical standard for marine sediments. The Cleanup Screening Level (CSL), or the "minor adverse effects level," helps identify areas of potential concern that may be designated cleanup sites. The SQS chemical criterion is selected as the indicator because it is the more sensitive of the two criteria for environmental protection. Point source stations are located near King County wastewater treatment plant outfalls and combined sewer overflow outfalls.

Percent of marine sediment sites sampled by King County that meet Washington State sediment quality standards



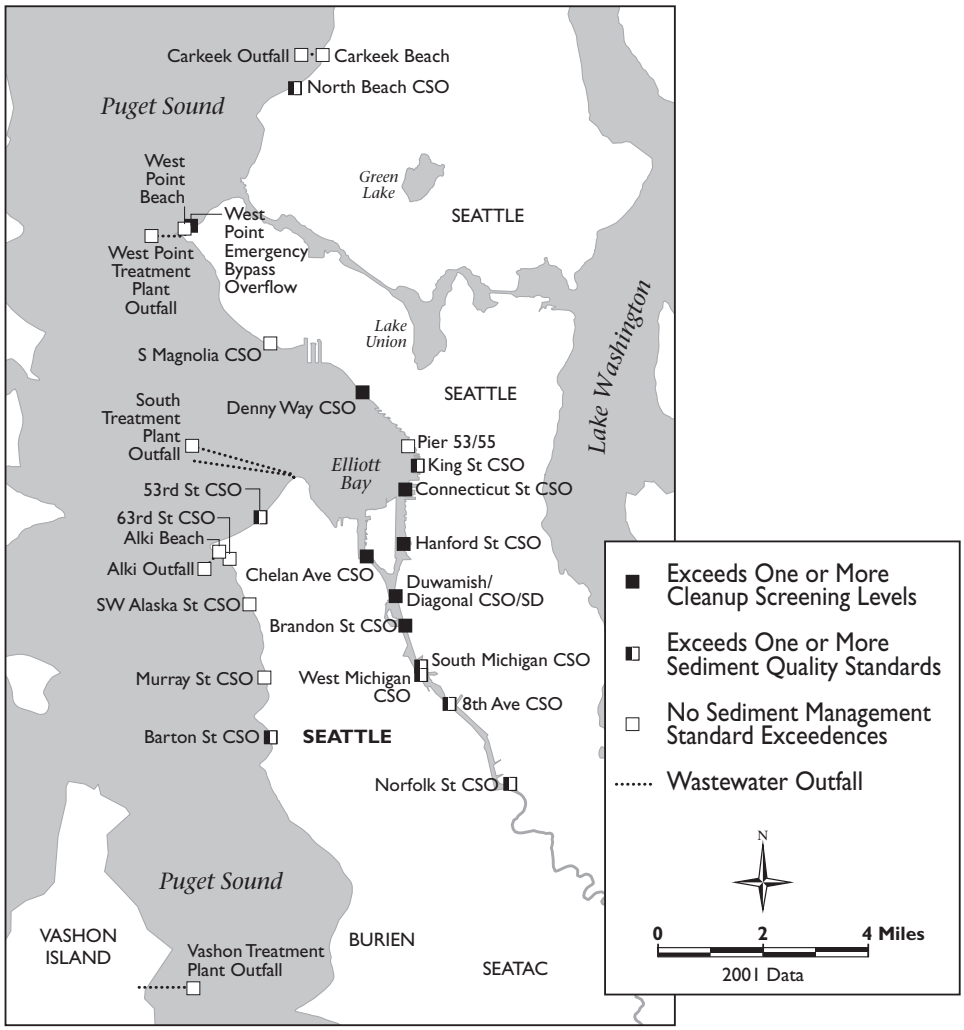
8a. Ambient Sites **8b. Point Source Sites**

OBSERVATIONS

Based on 2001 sampling data, two ambient sites do not meet sediment quality standards, but do not exceed the cleanup screening levels. Although they are located within the Duwamish waterway there are no specific plans to address them at this point in time. As such, the ambient target is considered a "non-degradation" target such that conditions should not get worse.

Of the 15 point source-related sites that exceed the SQS, eight do not exceed the CSL and do not therefore require clean up or monitoring. Six of the remaining seven point source sites that exceed the SQS are associated with combined sewer overflow outfalls and one is associated with an emergency overflow.

King County point source sediment monitoring stations



King County is in the process of assessing and redesigning the marine ambient and outfall sediment sampling program, therefore, no new samples have been collected. However, other related programs have collected data at some of the point source locations.

OUR STRATEGY

Strategies to achieve the 2007 target focus on collaborating with other organizations, including the City of Seattle, Port of Seattle, and Boeing, with whom King County has joined to form a public-private partnership called the Lower Duwamish Waterway Group. This group will be funding cleanups at "early action sites" as part of the Lower Duwamish Waterway Superfund process. A partial cleanup was completed in 2004 at the first of these sites, the Duwamish/Diagonal Way site. A follow-up cleanup is scheduled for Spring 2005. WTD expects that the follow-up cleanup to reduce the contaminated outfall sites by one.

The cleanup of the Lower Duwamish Waterway includes a multi-agency source control effort to reduce the potential for future recontamination. In addition to the early action sites, additional sediment site cleanups may be completed later under Superfund or as part of other activities in the Duwamish waterways. It is expected that three to five additional sites could be addressed by 2010.

RATING

Results, Target and Outcome

8a. Ambient Sites

2004 Results: 83 percent

2007 Target: 83 percent

Outcome: 100 percent

Two ambient sites do not meet the SQS. The target is a non-degradation approach. The long-term outcome for marine sediments is that no sediment sampling locations exceed SQS.

8b. Outfall Sites

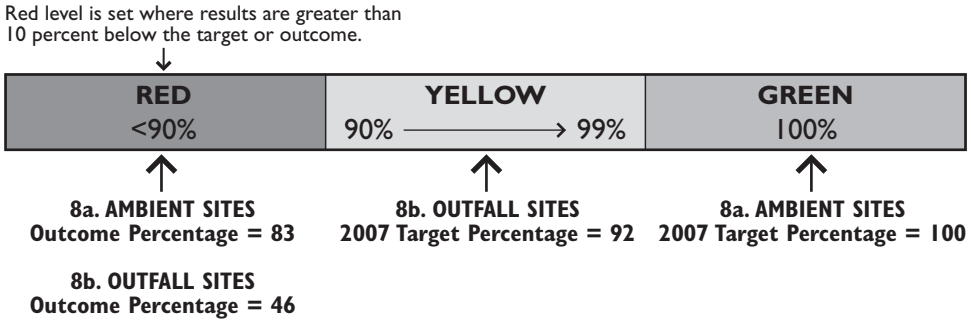
2004 Results: 46 percent

2007 Target: 50 percent

Outcome: 100 percent

Fourteen point source sites still exceed the SQS now that the target is met. The long-term outcome for marine sediments is that no sediment sampling locations exceed SQS. The results for outfall sites are being treated as agency performance measures due to the degree of control we exert on the outcome.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP's Science, Monitoring and Data Management Section.

9 Phosphorus concentrations in selected, managed small lakes

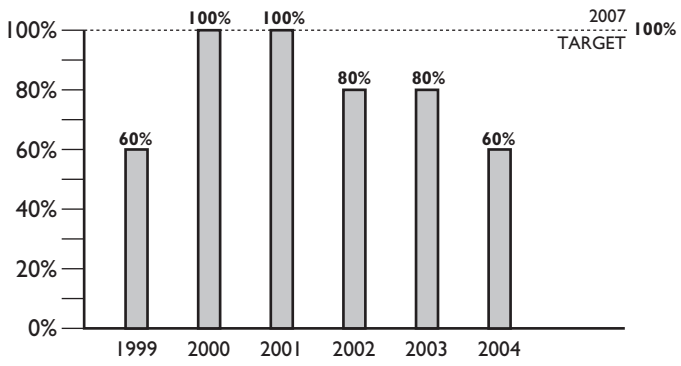
ABOUT THIS PERFORMANCE MEASURE

Lakes provide numerous environmental benefits in the county, as well as aesthetic and recreational opportunities. However, natural changes, development, and other human activities all affect lake quality. In this region, phosphorus is most often the nutrient that limits algal growth. Thus, if the amount of phosphorus entering lakes is controlled or reduced, the incidence of nuisance algal blooms is likely to decrease. Phosphorus can be managed through well-designed drainage systems, replacing septic tanks with sewers, and changing homeowner behaviors using education and incentives. DNRP's goal is to maintain all current beneficial uses of county lakes. However, current resources can only support monitoring or management programs in a limited number of lakes. Using phosphorus concentration as an indicator gives us an inexpensive tool to assess the potential for algal blooms and allows us to focus limited county resources on lakes with signs of degradation.

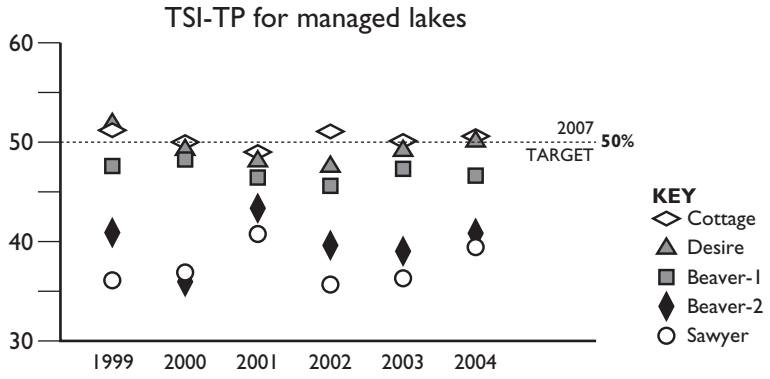
This measure uses summer total phosphorus concentrations converted to Trophic State Indicators (TSI-TP) for the five lakes in King County with approved Lake Management Plans. Trophic State Indicators relate phosphorus to the amount of algae that the lake can support. Values below 50 are considered low or moderate in potential for nuisance algae blooms. Values above 50 are considered high. While over 50 smaller county lakes were monitored in 2004 for phosphorus content, only the five lakes with official management plans have had detailed studies and explicit management activities in their watersheds to allow correlation of water quality with county actions. To add context to changes in percentage, the actual data for each lake are reported in figure 9b.

In addition to the performance measure, 31 lakes have long enough monitoring records to produce a regional picture for county lakes, and those data are shown above for comparison to the managed lakes as an environmental indicator of regional water quality (figure 9c).

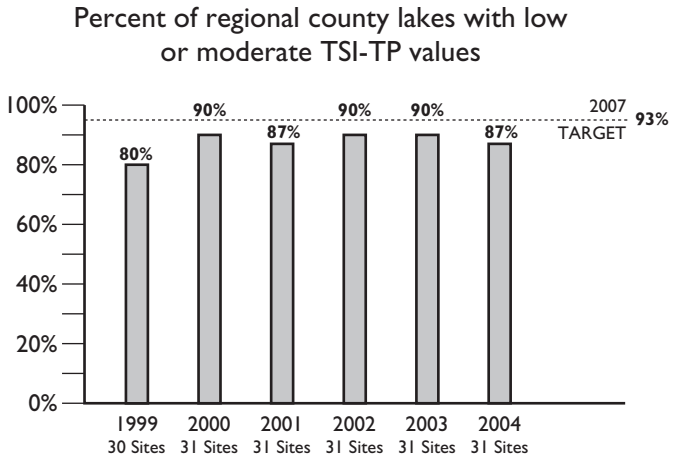
Percent of five county lakes with low or moderate TSI-TP values



9a. Managed Lakes



9b. Managed Lakes



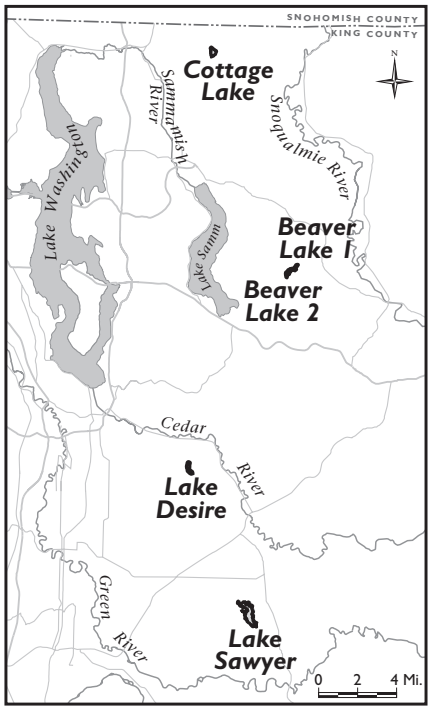
9c. Regional Lakes

OBSERVATIONS

Lakes vary annually, depending on watershed inputs, weather and biological interactions, which combine to create the conditions in each lake. For example, results for the five managed lakes show that several lakes are varying across the threshold of 50 from year to year, thus causing the measure's results to vary.

Although high productivity often relates to "bad" conditions, it may not reduce beneficial uses in all cases, depending on the natural condition of the lake. However, a trend in a particular lake towards increased TSI-TP is certainly due to watershed changes and cannot be discounted. Since the managed lakes are currently meeting state designated beneficial uses, an appropriate target for TSI-TP is the value of 50 used as the threshold for predicting high productivity.

Lakes with
lake management plans



OUR STRATEGY

We plan to monitor the managed lakes and implement all elements of the plans for lakes in rurally zoned King County, with community support, as funds become available. If any of the other lakes in the county begins to show serious deterioration in terms of their beneficial uses, producing and implementing a lake management plan will be considered. Since several of the 31 lakes included in the indicator appear naturally productive, based on several lines of evidence, the goal of 100 percent for this indicator is not supported, and an alternative goal of 93 percent is used for this measure, allowing for naturally high productivity in a small number of lakes.

RATING

Results, Target and Outcome

9a. Results, Target and Outcome for the 31 regional lakes

2004 Results: 87 percent
2007 Target: 93 percent
Outcome: 93 percent

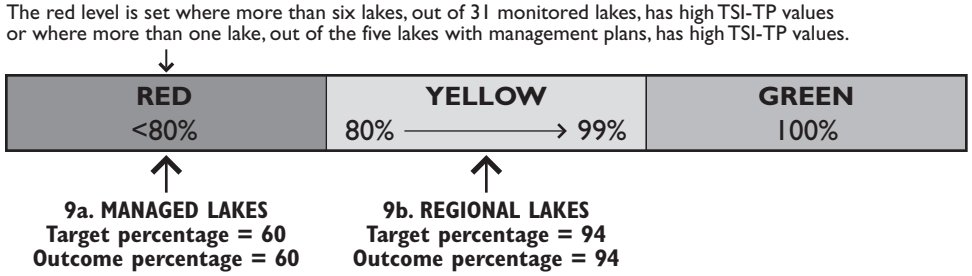
The long-term outcome for the 31 selected lakes is that all but two lakes will have low or moderate TSI-TP values.

9b. Results, Target and Outcome for the managed lakes

2004 Results: 60 percent
2007 Target: 100 percent
Outcome: 100 percent

The long-term outcome for the five selected lakes is that all of these lakes will continue to have low or moderate TSI-TP values.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

King County Lake Monitoring Report, 1996 - 2004.

OUTCOME: Lakes are healthy for humans and aquatic species

Percent of monitored large lake samples that meet Washington State water quality standards for fecal coliform bacteria

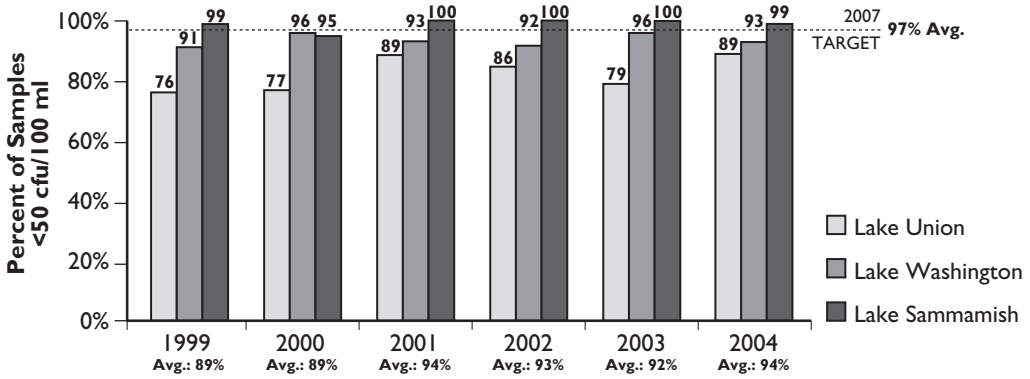
10

ABOUT THIS INDICATOR:

The presence of fecal coliform bacteria in aquatic environments indicates that the water has been contaminated with the fecal material of humans, birds or other animals. Fecal coliform bacteria may enter the aquatic environment from household or farm animals, wildlife, stormwater runoff, untreated wastewater effluent, and failing septic systems. Although these bacteria themselves are usually not harmful, they often occur with other disease-causing bacteria so their presence indicates the potential for pathogens to be present and be a risk to human health.

The lake standard for fecal coliform bacteria addresses human safety due to direct contact with the water from activities such as swimming and wading. The standard is a geometric mean value of less than 50 colonies/100 ml and not more than 10 percent of all samples obtained for calculating the geometric mean value shall exceed 100-colonies/100 ml (WAC 173-201A). Sites used for this indicator are located in both mid-lake or open water and nearshore locations.

Percent of non-swimming beach samples that meet fecal coliform standard



OBSERVATIONS

Even though this measure uses an exceptionally difficult to attain standard, 99 percent of the Lake Sammamish samples and 93 percent of the Lake Washington samples achieve this high standard. Lake Union had less samples meeting this standard (89 percent), most likely due to the negative influence of the numerous combined sewer overflows and stormwater outfalls into the lake, however this is a ten percent increase from 2003.

OUR STRATEGY

The Henderson/M.L. King project will help eliminate overflows from sewers to Lake Washington during extreme storms and improve the sewer system throughout Rainier Beach. The project, which began in the fall of 2002, will be completed in spring 2005.

This project will reduce these overflows by providing improved storage and treatment capacity within the sewer system. Following storms, these stored flows will be routed to the existing King County treatment plants at West Point and Renton. When completed, this project will significantly reduce the level of fecal coliform bacteria in Lake Washington from combined sewer overflows and contribute to achieving the five-year target.

With the completion of the Denny Way/Lake Union Project in 2005, it is predicted that both the volume and the frequency of untreated combined sewer overflows to Lake Union and Elliott Bay will be reduced. The project was designed to store the flows during small and moderate storms and transfer them to the West Point Treatment Plant when capacity is available.

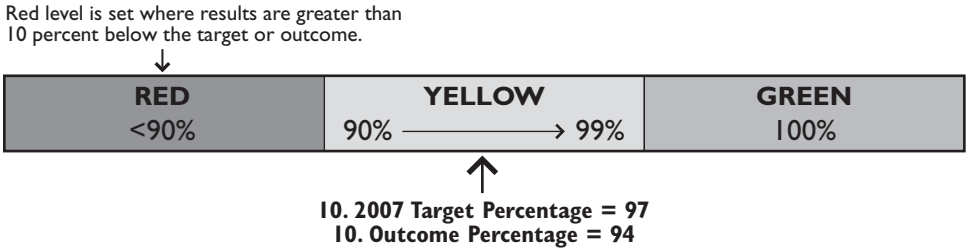
RATING

Results, Target and Outcome

2004 Results: 89, 93, 99 of samples met standard: average of 94 percent
2007 Target: 95 percent for lakes Union and Washington; 100 percent for Lake Sammamish: average of 97 percent
Outcome: 100 percent

The long-term outcome for large lakes is to have no samples violate fecal coliform bacteria standards.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE:

DNRP's Science, Monitoring and Data Management Section; Henderson Project: *http://dnr.metrokc.gov/wtd/henderson-cso/index.htm*; Denny Way Project: http://*dnr.metrokc.gov/wtd/dennyway/index.htm*.

Percent of monitored swimming beach sites on large lakes that meet the target for fecal coliform bacteria

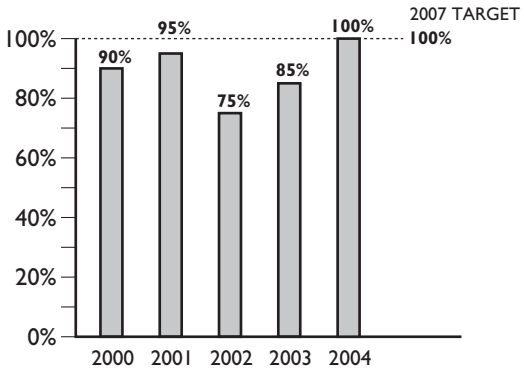
11

ABOUT THIS INDICATOR

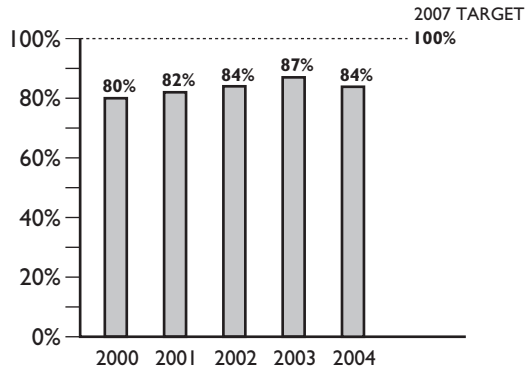
The presence of fecal coliform bacteria in aquatic environments indicates that the water has been contaminated with fecal material from humans, birds or other animals. Fecal coliform bacteria may enter the aquatic environment from household or farm animals, wildlife, stormwater runoff, untreated wastewater effluent, or failing septic systems. Although these bacteria themselves are usually not harmful, they often occur with other disease-causing bacteria so their presence indicates the potential for pathogens to be present and be a risk to human health.

The target indicator for fecal coliform bacteria is met when there is less than 200 colonies/100ml in any sample. This target is based upon, but more conservative than, the Ten State Standard which requires that the geometric mean is less than 200 colonies/100 ml and that no single sample is greater than 1000 colonies/100ml. Public Health-Seattle & King County and the Washington State Department of Health currently use the Ten State Standard. When the swimming beaches achieve the standard, the health departments assume negligible risk to the bathing public from fecal contamination. The Ten State Standard is less restrictive than the lake bacterial standard

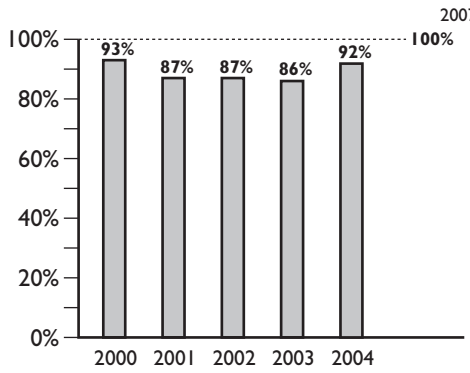
Percent of swimming beach samples that meet the bacteria target (<200 colonies/100mL)



11a. Green Lake: 1 Site



11b. Lake Washington: 18 Sites



11c. Lake Sammamish: 2 Sites

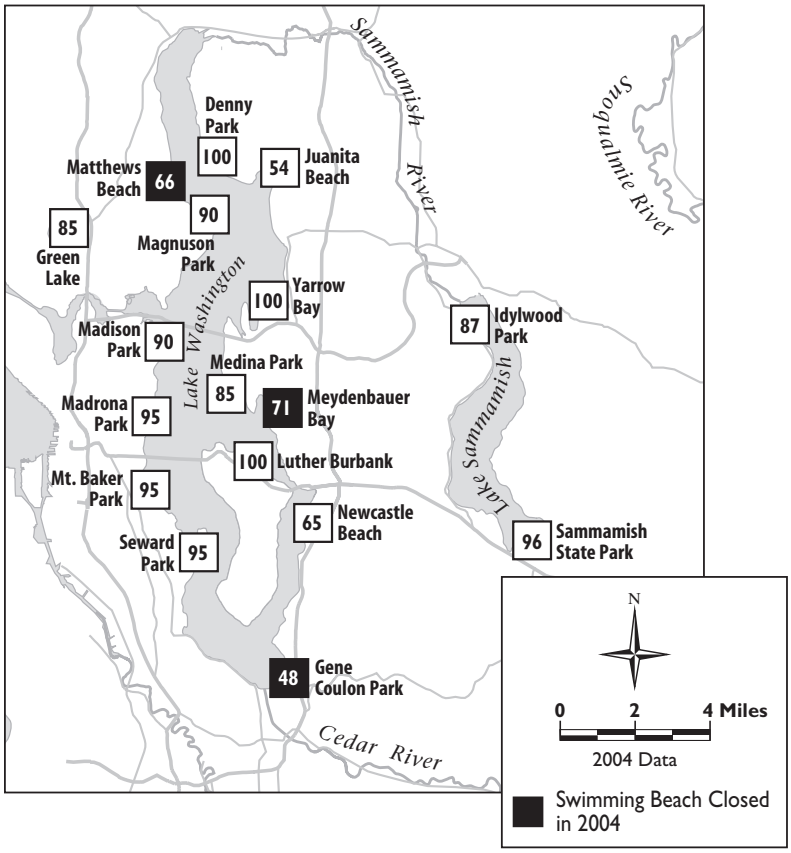
(Indicator No. 11) and may be modified to an E. coli-based standard in the future because of regulatory changes by the U.S. Environmental Protection Agency.

OBSERVATIONS

Bacteria levels were substantially lower in Green Lake than in previous years, whereas Lake Washington and Lake Sammamish have remained fairly consistent. Three swimming beaches along Lake Washington were closed for swimming in 2004. Matthews Beach was closed due to high stormwater bacteria concentrations from Thornton Creek. Meydenbauer Beach was closed due to a broken sewer line next to the park. Gene Coulon beach was also closed and although the source of bacteria was not determined the most likely source is waterfowl. There were no sewer line breaks, spills, or leaks, nor is there an adjacent stream that contributes high counts of bacteria into the swimming area.

For lakes Sammamish and Washington, there are a greater number of bacterial exceedances at the swimming beaches than at the ambient monitoring sites (see comparison with data in Indicator No. 10). There is no monitoring conducted by DNRP at Green Lake other than the swimming beach bacterial monitoring. In addition, since there are no public swimming beaches on Lake Union, which is the other lake in Indicator No. 10, it is not discussed here.

Percent of samples at each swimming beach that met fecal coliform bacteria target



OUR STRATEGY

When the bacterial counts at the swimming beaches are greater than the target for this indicator (200 colonies/100 ml), the counts are often substantially higher and can result in temporary closures of a few public swimming beaches. Monitoring conducted by King County has identified waterfowl as the primary source of the fecal coliform contamination at many of the beaches during these times. Modifications to park maintenance procedures and control of non-migratory, non-native waterfowl will contribute to meeting the water quality and public health goals at the swimming beaches.

RATING

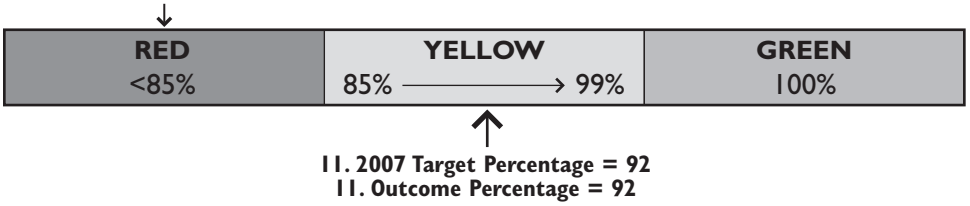
Results, Target and Outcome

2004 Results: 92, 100, 84 percent of samples meet target: average of 92 percent
2007 Target: 100 percent
Outcome: 100 percent

The 2007 target and long-term outcome for swimming beaches on large lakes is to have no sites violate the fecal coliform bacteria target.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings

Red level is set where degradation from current results indicates additional attention is needed. This standard is somewhat lower than other water quality ranges because fecal coliform is an indirect, rather than direct, measure of health risks.



DATA REFERENCE:

DNRP's Science, Monitoring and Data Management Section.

OUTCOME: Streams and rivers provide high quality habitat for aquatic species.

12 Percent of stormwater control facilities maintained by others that are functionally compliant with county maintenance standards

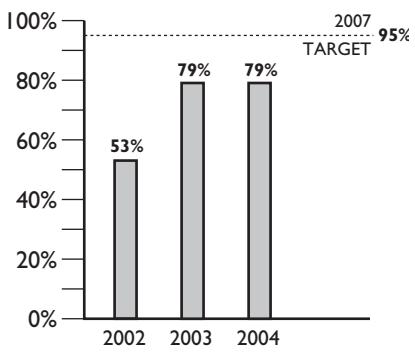
ABOUT THIS PERFORMANCE MEASURE

Increased stormwater flow and degraded water quality from development are significant sources of stream degradation and flooding. In response, DNRP has developed a stormwater design manual that specifies the design and maintenance standards for stormwater control facilities required on new developments and redevelopments to reduce these impacts. DNRP is also responsible for inspecting these stormwater control facilities on a regular basis after each development has been constructed to make sure the facilities comply with maintenance standards. These standards specify the threshold at which cleaning or repair action must be taken to ensure proper function, for example, the specific depth of sediment or presence of physical defects.

The focus of this performance measure is on those facilities for which WLR does not have direct maintenance responsibility. Examples of these facilities include: privately maintained commercial facilities, school district facilities, county Roads Services Division off road drainage facilities, and county Parks division drainage facilities. Since WLR staff inspects and oversees the maintenance of residential drainage facilities, the compliance factor for those facilities is very close to 100 percent, with the exceptions being facilities that may suffer damage in a year when the facility is not scheduled for inspection. These facilities are not included in the performance measure.

For facilities that are not maintained by DNRP, DNRP's Stormwater Services annually inspects the facilities and determines the maintenance actions needed, if any, for maintenance standards compliance. If maintenance actions are needed, DNRP issues a maintenance correction letter, or MCL, directing the property owner to implement the necessary actions and return a form certifying that the required actions were completed. DNRP does follow-up spot checks on some of the facilities for which a certification form was returned to verify that the required actions were correctly implemented. The spot checks focus on facilities where required maintenance affects their function. As an incentive to maintain drainage facilities to accepted standards, owners who return the MCL certifying that they have completed the prescribed maintenance receive a Surface Water Management Fee rate discount.

Privately owned
stormwater facility compliance



GOALS

Environmental Quality
Achieve a net gain in environmental quality by protecting and restoring the natural environment, ensuring public health and safety, and exceeding environmental standards

Waste to Resource

Community Investment

Leadership

Price of Service

Customer Satisfaction

Employee Involvement and Morale

The percent of functionally compliant facilities in any given year is determined by dividing the number of facilities that are in compliance by the total number of facilities inspected. The number of facilities in compliance is derived from both direct observation and extrapolation of the compliance rate for facilities after spot checks are performed.

OBSERVATIONS

There are approximately 840 stormwater facilities in unincorporated King County included in by this performance measure. The county has about 75 additional private facilities added to the inspection inventory each year. MCLs are issued for approximately 450 facilities per year. Spot checks were performed on approximately 100 facilities inspected in 2004 where the MCL was returned with an indication that the required maintenance was completed.

In 2002, the measure considered any incomplete work activity, including such things as missing manhole lid bolts, as an indication that the facility was out of compliance. Unfortunately, this gives the impression that the problem is more severe than it may actually be since something like a missing lid bolt does not affect facility function. In order to correct this, the current measure has been developed to include only facilities with a functional problem, for example, excess sediment that limits the flow in pipes. For 2002, the compliance figure was 53 percent, which included all facilities with any level of maintenance problem. For 2003and 2004, given that the compliance rate is limited to functional problems, the rate is closer to 80 percent.

Several variables can affect the compliance rate. One major factor is the turnover in property owners. Frequently new property owners are unaware of the stormwater system or maintenance needs until county staff contact them. Another factor is the cost of maintenance relative to the realized savings in the Surface Water Management fee. In addition, some property owners forget about the maintenance or to return the completed MCL.

OUR STRATEGY

In order to improve the compliance rate for facilities, Stormwater Services has initiated a multi-pronged approach including increased owner education such as educational materials in the MCL letters explaining more about maintenance or reminder flyers; more technical support; and enforcement actions for chronic problem facilities. By focusing on facilities with functional problems we can avoid using staff resources on minor problems. Despite the increase in private facilities requiring inspection within the county year to year, annexations will continue to limit funding for staff. Additional resources for enforcement may be needed to achieve the five-year target.

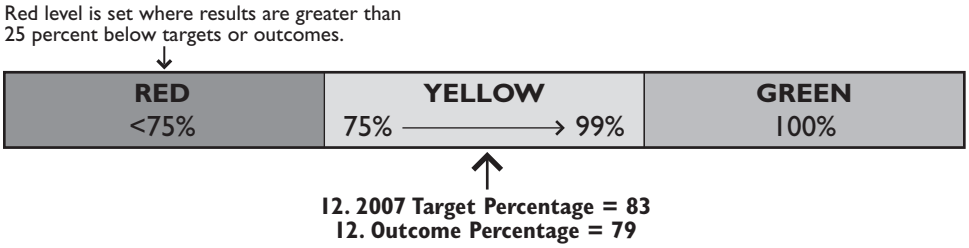
RATING

Results, Target and Outcome

2004 Results: 79 percent
2007 Target: 95 percent
Outcome: 100 percent

The 2007 target is aggressive considering current staffing levels. The long-term outcome for this measure is that 100 percent of stormwater facilities are in compliance.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE
DNRP's Stormwater Section.

OUTCOME: Streams and rivers provide high quality habitat for aquatic species.

Percent of stream stations with low or moderate water quality problems based on Water Quality Index values

13

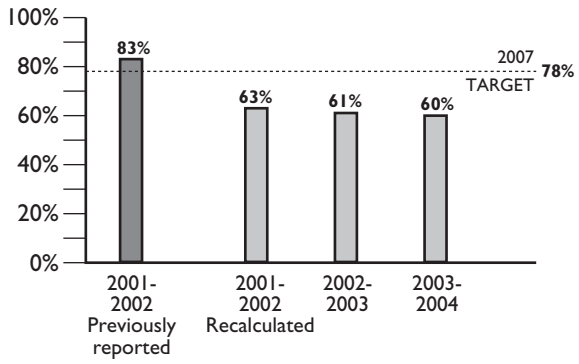
ABOUT THIS INDICATOR

Water quality is one essential measure of environmental conditions. The Water Quality Index (WQI) attempts to integrate a series of key water quality factors into a single number that can be used for comparison over time and among locations. The WQI used here is based on a version proposed by the Washington Department of Ecology and originally derived from the Oregon Water Quality Index.

The WQI is a number ranging from 10 to 100 - the higher the number, the better the water quality. For temperature, pH, fecal coliform bacteria and dissolved oxygen, the index expresses results relative to state standards required to maintain beneficial uses. For nutrient and sediment measures, where the state standards are not specific, results are expressed relative to expected conditions in a given ecoregion. Multiple constituents are combined and results aggregated over time to produce a single score for each sample station.

In general, stations scoring 80 and above met expectations and are of "low concern," scores 40 to 80 indicate "moderate concern," and water quality at stations with scores below 40 did not meet expectations and are of "high concern." Fifty sites in the Lake Washington and Green-Duwamish drainage basins were sampled monthly in 2004 for numerous water quality parameters, including those used to determine the WQI.

Percent of stream stations with low or moderate water quality concerns

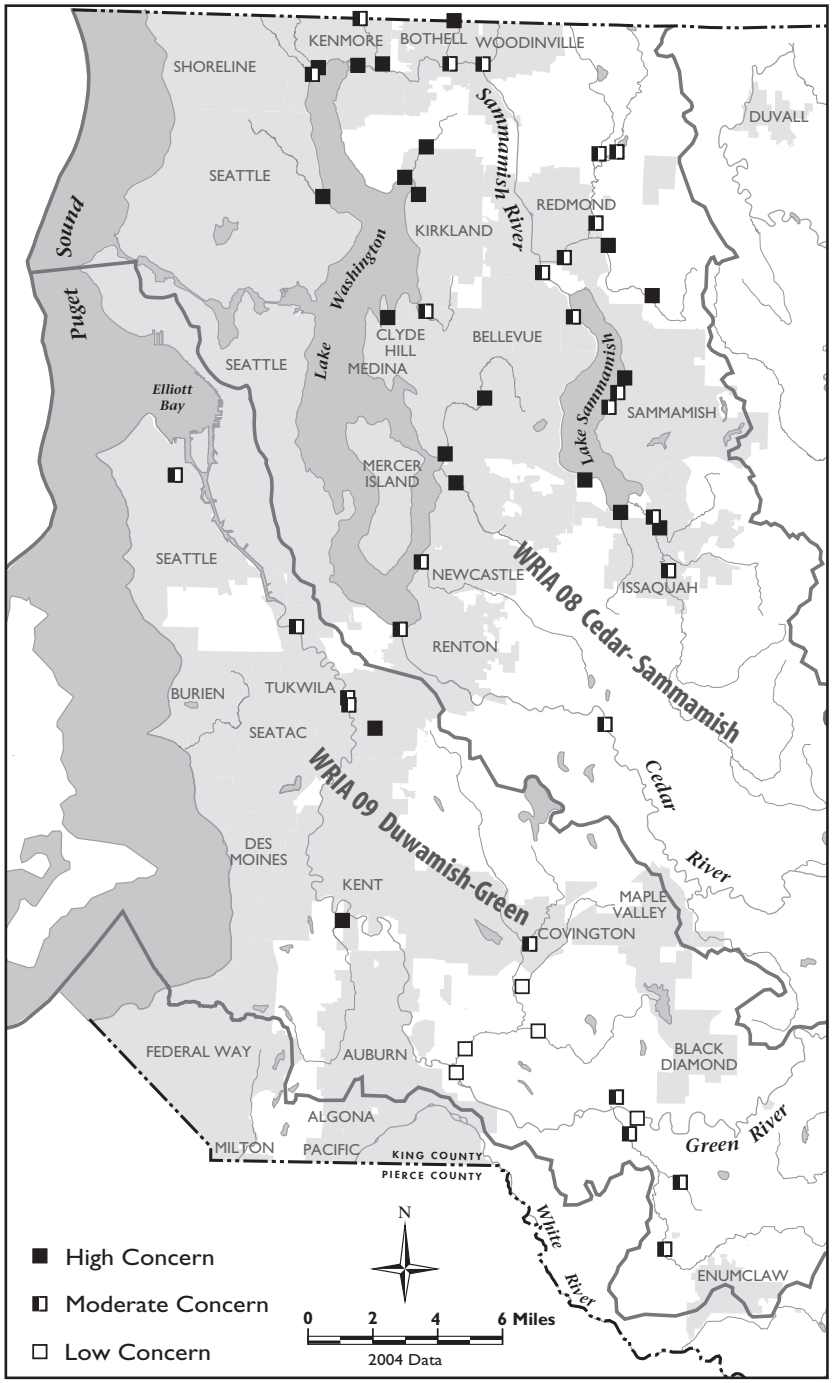


OBSERVATIONS

Given a population of almost two million residents and the intense urbanization of the area, overall stream water quality in King County is fairly good. Water quality at 30 of the 50 sampled sites, or 60 percent, were considered either "low concern" or "moderate concern," while 20 sites (or 40 percent) were rated "high concern."

In the Water Resource Inventory Area (WRIA) 9/Green-Duwamish basin, five of the 14 sites were rated of "low concern," seven sites were of "moderate concern," and two sites were of "high concern." Of the 36 sites in the WRIA 8/Lake Washington basin no sites rated of "low concern," 18 sites were of "moderate concern," and 18 were of

Water Quality Index



"high concern." Overall, "high concern" ratings were caused at least in part by excessive bacteria levels at 14 of the 20 sites. Low dissolved oxygen concentrations were also a problem at 11 "high concern" sites and/or high phosphorus concentrations were at nine "high concern" sites.

Pets and failing septic systems are the most likely sources of bacteria in the urban areas. Poor livestock management practices can be a potential source of bacteria in agricultural areas. In wetland areas, wildlife and stagnant water conditions can lead to elevated bacteria counts. High phosphorus concentrations are found in fecal material and elevated concentrations are often linked to similar sources as bacteria. Phosphorus

is also released from the sediment when dissolved oxygen concentrations are low. In addition, elevated phosphorus concentrations are linked to areas with high volumes of stormwater runoff and areas undergoing development.

Three sites were rated "high concern" solely due to low dissolved oxygen concentrations. Low dissolved oxygen concentrations can be associated with low flows, high temperatures (colder water holds more oxygen), and high levels of organic matter (bacteria use up oxygen in the process of decomposition). Low flows and high temperatures were a particular problem during the late spring and early summer of the 2003-2004 water year as there were extended dry periods.

OUR STRATEGY

Preventing and repairing damage to King County's waterways is one of the primary goals of WLR. Operating under a combination of federal, state, and local mandates, the division undertakes a wide variety of activities to maintain the function and values of King County streams. This indicator pinpoints "high concern" sites so that Water and Land Division programs and projects can focus efforts in those areas. This may involve a constructed or engineered solution, identifying where or how pollutants are entering the stream, or educating adjacent property owners about the impacts of pesticides and fertilizers on streams. In addition, WLR often works in coordination with an incorporated city to resolve a water quality problem within their jurisdiction.

This indicator also highlights the need for more comprehensive and coordinated approaches to resolving problems related to instream flow management since lower flows exacerbate every water quality measurement of the WQI. One key area where this need is apparent is water supply planning. King County will continue to advocate for water supply planning at a regional scale, covering all watersheds in King County. Planning at this scale will allow for more consistent understanding of the location, causes, effects, and necessary mitigation. It will also ensure that solutions incorporate an effective mix of solutions across the multiple basins and watersheds in which problems are found. When combined with existing cross-watershed actions for managing land use, stormwater, and flooding, regional water supply planning will complete the necessary foundation for addressing instream flow factors that contribute to improving the status of this indicator.

RATING

Results, Target and Outcome

2004 Results: 60 percent
2007 Target: 78 percent
Outcome: 100 percent

The 2001-2002 water year data were recalculated based on new methodology being used by the Washington Department of Ecology. Since the original 2007 target was set based on the earlier baseline, the new target is based on the reestablished baseline and reduced from 96 percent to 78 percent. The long-term outcome for streams is that no stream stations are considered "high concern."

Performance-to-Target and Performance-to-Outcome Ranges and Ratings

Red level is set where, based on the 2007 target, 15 percent of stations (7 stations) are of high concern. Applied to the outcome, the red level represents 10 percent of stations (5 stations) in the high concern category.

13. 2007 Target Percentage = 63
13. Outcome Percentage = 60

DATA REFERENCE
DNRP's Science, Monitoring and Data Management Section.

OUTCOME: Streams and rivers provide high quality habitat for aquatic species.

Percent of streams in good condition or better based on the Benthic Index of Biotic Integrity (B-IBI)

14

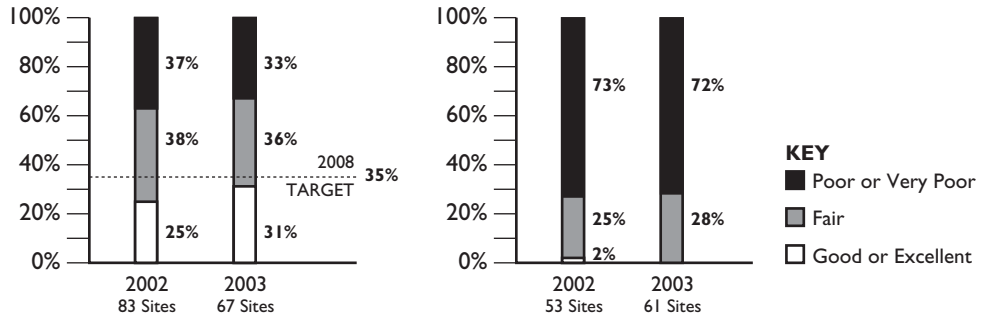
ABOUT THIS ENVIRONMENTAL INDICATOR

King County monitors stream health by collecting samples of benthic macroinvertebrates, commonly referred to as "bugs," from selected streams. Scientists use a scorecard system called the Benthic Index of Biotic Integrity (B-IBI) to rank the health of streams. The scores are based on the types of stream bugs living in the stream and the number of different kinds of stream bugs present. By using this scoring system, we can compare very different streams to each other and rank their ecological health.

King County's benthic index is composed of ten metrics that measure different aspects of stream biology, including taxonomic richness and composition, tolerance and intolerance, habit, reproductive strategy, feeding ecology, and population structure. Each metric describes some aspect of the community that responds to degradation. The raw value of each metric is calculated, and from the raw value a score is assigned to the metric. The ten scores are then added to produce the overall B-IBI score that ranges from 10 to 50 and these are labeled very poor, poor, fair, good or excellent.

10-16	18-26	28-36	38-44	46-50
Very Poor	Poor	Fair	Good	Excellent

B-IBI results for stream stations



14a. Streams in Unincorporated King County

14b. Streams in Incorporated King County

OBSERVATIONS

The 2003 data are the most recent available. Because the 2002 sampling efforts included more data than all previous years combined, these data represent the best available baseline. Sampling in 2003 was intended to replicate the program initiated in 2002; however, not all sites were sampled in 2003 due to insufficient flows at some of the sites. Sampling for 2002 and 2003 was conducted using a randomized design for streams in both incorporated and unincorporated King County. A total of 128 stations in 55 streams within 15 subbasins across the Lake Washington/Cedar/Sammamish watershed (WRIA 8) and the Green/Duwamish watershed (WRIA 9) were sampled.

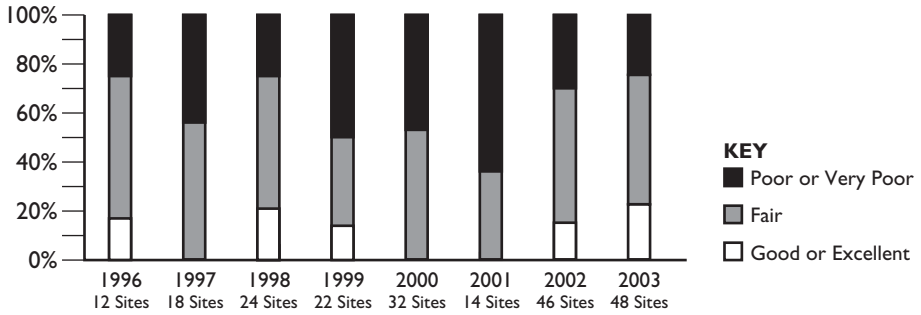
Not surprisingly, the results for unincorporated and incorporated areas within King County are dramatically different. In 2003, 31 percent of the sampled streams in unincorporated King County had benthic insect communities in good or excellent condition, whereas none of the incorporated stream stations rated this high. In addition, although both unincorporated and incorporated stations exhibited a high number of stations with poor or very poor ratings, incorporated stations had a higher percentage (72%) than did unincorporated (33%). Because streams can traverse jurisdictions, a steam station may reflect conditions that arise from conditions in another adjacent jurisdictional area.

In order to compare the 2003 results with historic data, Figure 14c shows results from areas that were previously sampled (Lower Cedar River tributaries and Soos, Bear and Issaquah creeks) between 1995 and 2002.

The following observations are notable:

- The 2003 results were very similar to the 2002 results.
- The 2002 and 2003 sampling design was more rigorous and included more samples than in previous years. Changes in historic sample numbers make year-to-year comparisons prior to 2002 more difficult.
- Comparisons of 2002 and 2003 data with data from years without such intensive sampling should be made with caution. High inter-annual variability suggests that large data sets will be required to develop long-term trends.

14c. B-IBI ratings for selected stream stations in Bear, Soos and Issaquah Creeks and Cedar River tributarues



OUR STRATEGY

WLR has a multi-pronged strategy to address stream health. Major programs focus on minimizing degradation from development, minimizing pollutant runoff from farms, preventing the loss of forest cover and its numerous stormwater benefits, or implementing watershed improvement projects identified in WRIA-based salmon recovery plans. King County's normative flow project (see Indicator No. 16) will provide additional tools to understand the role of stream flow and its potential management applications to B-IBI.

King County's Stormwater Program focuses on flow control to minimize adverse effects from development, providing a surface water design manual, as well as, inspecting and maintaining stormwater control facilities.

The county also acquires and works with landowners to restore streamside parcels that have important benefits as aquatic resources. In addition, WLR's capital projects program builds small and large projects in rural and urban King County that enhance and restore streams and wetlands while protecting public safety. Habitat restoration projects include streamside and wetland planting, livestock fencing, in-stream habitat improvements, removal of barriers to fish migration and removal of invasive and non-native plants.

Basin stewards work with the local community to respond to resident's inquiries for watershed protection, coordinate efforts among diverse public agencies, facilitate implementing watershed projects, provide assistance to monitoring programs and provide public education opportunities. The Agriculture Program works with farmers and livestock owners to prevent agricultural pollutants from running off into streams.

In addition to the above activities, implementation of the county's Critical Areas Ordinance and federal total maximum daily load requirements for impaired water bodies will also support water quality improvements in both the incorporated and unincorporated areas.

RATING

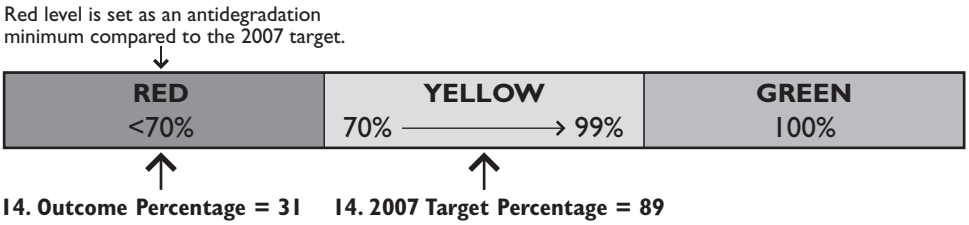
Results, Target and Outcome

2003 Results: 31 percent
2007 Target: 35 percent
Outcome: 100 percent

The 2007 target is to increase the good or excellent rated stream stations in the unincorporated to 35 percent. In addition, DNRP commits to a 2007 target of reducing the number of poor and very poor stations in the unincorporated area to 30 percent, and the fair stations to 35 percent. The long-term outcome is to ensure that 100 percent of stream reaches in unincorporated King County are rated as good or excellent.

No target or outcome has been set for the incorporated areas because these are in areas where the county has limited direct control.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

King County's Stream Bug Monitoring Home Page (http://*dnr.metrokc.gov/wlr/waterres/Bugs/index.htm*); Benthic Macroinvertebrate Study for Greater Lake Washington and Green-Duwamish River Watersheds: Year 2003 Data Analysis (*http://dnr.metrokc.gov/wlr/watersheds/green/water-quality-assessment.htm*)

OUTCOME: Streams and rivers provide high quality habitat for aquatic species.

15 Percent of acres in King County with aquatic habitat quality rated medium-high or better

ABOUT THIS INDICATOR

Habitat is the physical location or type of environment in which an organism or biological population lives or occurs. It can be measured both in quantity (area, volume, or length) and quality (measures that define usability). Typically, current day land use doesn't affect aquatic habitat quantity because direct loss of aquatic habitat is mitigated as part of development. Historically habitat loss occurred through actions that either blocked access to habitats (such as culverts and dams) or that significantly altered or filled in habitats (such as development of wetlands or tidal areas). Therefore it is the quality of aquatic habitat, usually as measured by changes in structural conditions (for example reduced amounts of amount of woody debris, pools, or hiding cover; or increases in sediment in salmon spawning gravels) or biological activity (type and amount of species such as where pollution intolerant species are replaced by tolerant ones) that is more informative for tracking conditions.

Aquatic habitat quality also serves as an intermediate indicator of the state of the natural environment because of its importance in helping to achieve additional environmental results, such as salmonid recovery. Aquatic habitat quality, along with water quality and quantity, provide the core building blocks for a healthy, functioning ecosystem. DNRP measures each of these structural building blocks— aquatic habitat quality, water quality and quantity—as well as key biological elements like benthic invertebrates and salmon to get a comprehensive picture of stream and river health (see figure 15a below).

Many aquatic habitat quality measures are difficult and costly to measure directly. DNRP is therefore using a composite score that integrates biological information with landscape conditions as a surrogate indicator of aquatic habitat quality. The relative aquatic habitat quality of all King County sub-basins in rural (between the urban growth and forest production boundaries) and urban (within the urban growth boundary) was evaluated using three sets of environmental data: salmonid usage, road density, and percent of forest cover. Road density is inversely correlated with aquatic habitat quality (the more roads, the lower the quality of streams) and forest cover is positively correlated with aquatic habitat quality (the more forest, the higher quality of streams). Each of the sub-basins was ranked on a three-point scale for each of the three data sets. The numerical rankings were then summed to give a composite score for each

Conceptual model of relationship between stream/river indicators

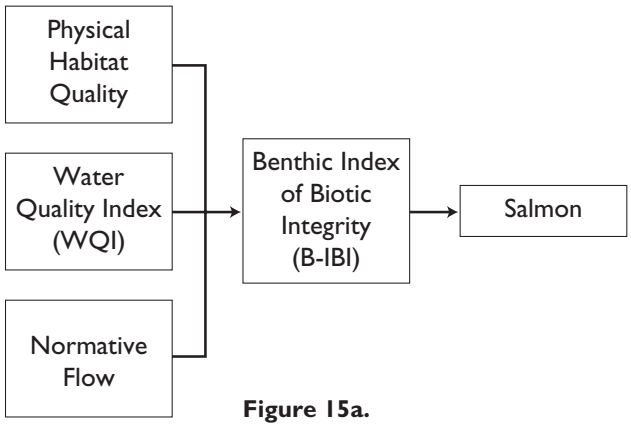


Figure 15a.

GOALS

Environmental Quality
Achieve a net gain in environmental quality by protecting and restoring the natural environment, ensuring public health and safety, and exceeding environmental standards

Waste to Resource

Community Investment

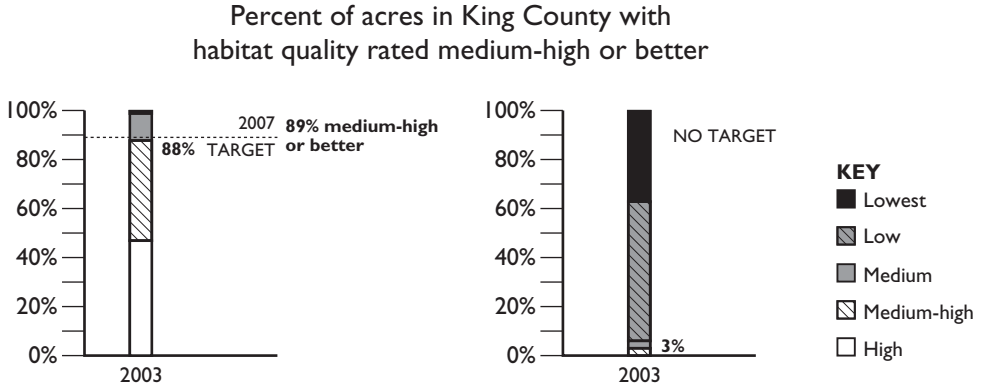
Leadership

Price of Service

Customer Satisfaction

Employee Involvement and Morale

sub-basin. The composite scores were then divided into five equal intervals, or quintiles, to determine the acres of land within rural and urban-zoned lands that were in catchments or sub-basins of lowest, low, medium, medium-high and high quality. Sub-basins were identified as discrete hydrologic drainage basins draining directly into a mainstem river, marine shoreline, or Lake Washington and Lake Sammamish.



15b. Rural King County **15c. Urban King County**

OBSERVATIONS

There are no new data being used in this measure for 2004. In 2005, we will review all parameters and update all information on fish presence, forest cover and road density for 2004.

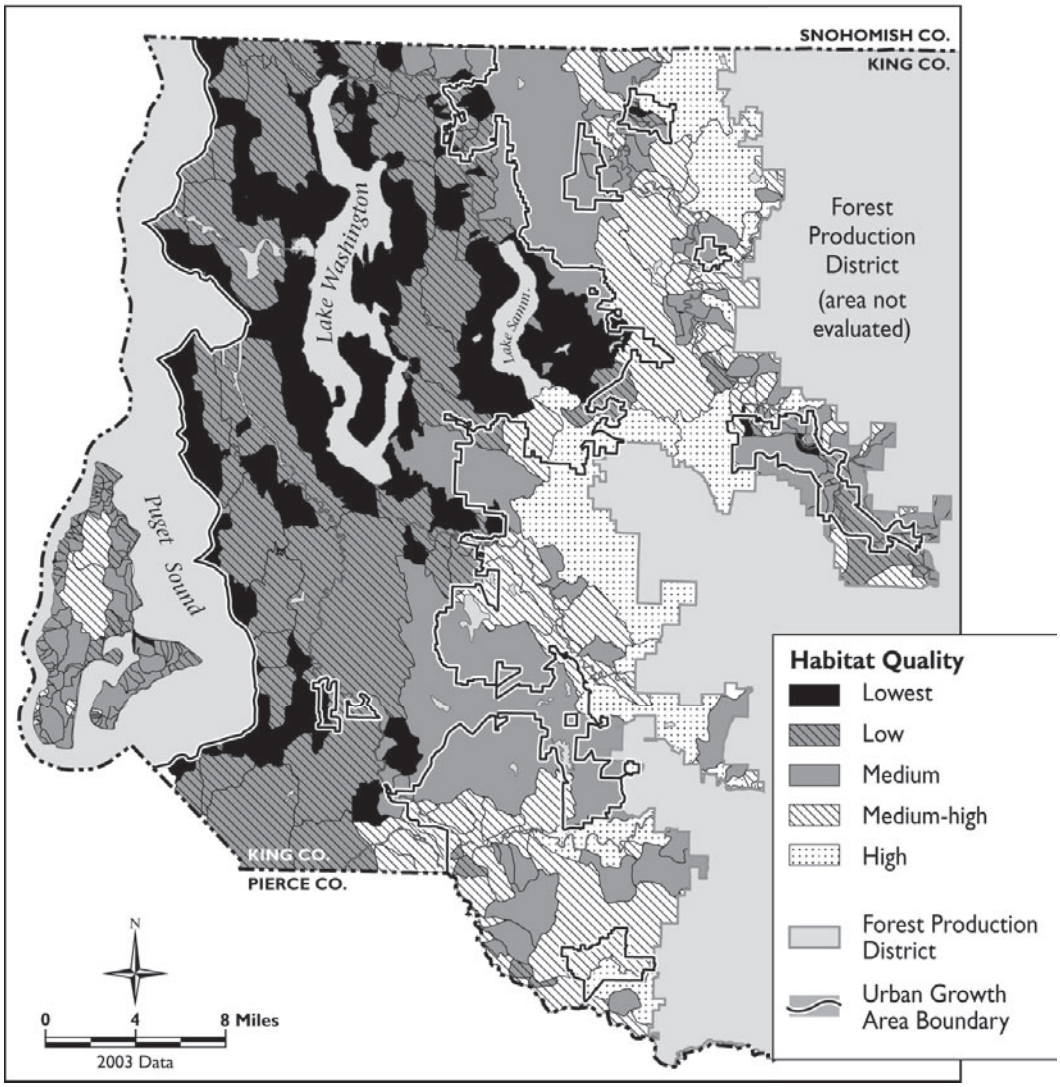
Not surprisingly, aquatic habitat quality in rural areas is dramatically better than in urban areas. In rural sub-basins, 88 percent of the total acreage is in the medium-high or high quality quintiles whereas only three percent of acreage in the urban sub-basins is in the medium-high category and none is in the highest category. The percent of rural acres considered of low quality is equivalent to over 14,000 acres. The percent of acres currently with low or medium quality habitat is equivalent to 110,000 acres.

As shown in Figure 15d, while the absolute acreage of higher quality sub-basins in the urban area is relatively low, there are sub-basins throughout the urban area that have medium to medium-high quality. These sub-basins are likely providing critical open space and salmonid habitat in areas that have high population densities. It is also important to note that the large rural acreage in rural sub-basins occurs in an area where more than 350,000 persons live.

OUR STRATEGY

King County is working in partnership with all jurisdictions in King County to develop and implement four Salmon Conservation Plans. These plans will recommend actions to both protect and, where feasible, restore salmonid habitats throughout the watersheds of King County. The plans, to be completed by June 2005, will include specific recommendations for landscape, riparian and in-stream habitat protection and restoration including capital improvement projects, stewardship, and incentive, volunteer, and regulatory options. In addition, King County adopted a new Critical Area Ordinance in 2004 that includes regulatory standards and best management practices (BMPs) that protect and restore vegetative cover and encourage practices that protect and/or restore salmonid habitat.

Habitat quality for subbasins in King County



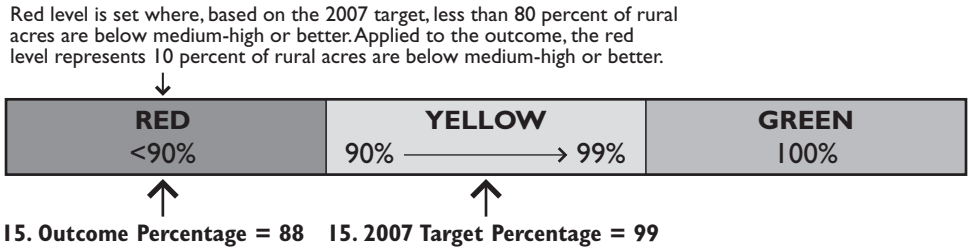
RATING

Results, Target and Outcome

2004 Results: 88 percent in rural King County
2007 Target: 89 percent in rural King County
Outcome: 100 percent in rural King County

No target has been set for the urban areas because these are in incorporated areas where the county has limited direct control. The interjurisdictional Salmon Conservation Plans will address these areas but will require implementation by the respective incorporated areas.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

King County, 2004 Best Available Science Volume II Assessment of Proposed Ordinances; Critical Areas, Stormwater, and Clearing and Grading Proposed Ordinances, King County Department of Natural Resources and Parks, Development and Environmental Services, Department of Transportation; 2003 King County Annual Growth Report.

OUTCOME: Streams and rivers provide high quality habitat for aquatic species.

16 Normative flows in rivers and streams

This indicator is still under development

ABOUT THIS INDICATOR

A number of factors influence habitat characteristics of rivers and streams. One of the most influential is the flow regime. Water quantity needs for rivers and streams – and the plants and animals that live in and around them – have customarily been determined in a regulatory context by establishing minimum water flows. While this approach may satisfy regulatory needs, it has proven ineffective in ensuring flow regimes that sustain the full suite of native aquatic species. Rather than try to protect aquatic life by managing only minimum flows, the concept of "normative flow" provides a more relevant, ecologically based means of understanding and managing water quantity. Normative flow refers to a flow regime that resembles the natural flow regime sufficiently to sustain all life stages of a diverse suite of native species, including salmon populations. This approach stresses the importance of pattern and temporal variation in key instream flow attributes - magnitude, frequency, duration, timing, spatial distribution, and rate of change of flows.

DNRP's work to date on normative flow has focused on the identification of metrics that show how instream flow factors are related to biological conditions in Puget Sound lowland streams. The analysis has identified hydrologic metrics that show a consistent pattern of deviation when historical (forested) conditions are compared to current conditions. The hydrologic metrics being evaluated are simulated using field calibrated continuous flow hydrologic models and 50 years (1950 – 2000) of precipitation data collected at SeaTac Airport. The models were developed for six lowland streams covering a range of landscape conditions in King County. On the biological side, the analysis has focused on several measures of biological condition that are derived from data collected under the Benthic Index of Biological Integrity approach (see Measure No. 14). These data have been collected in several streams in King County over the past decade and provide the most reliable and consistent reading of biological conditions for fauna among all available data sets.

The results of the analysis of the relationships between these metrics and biological data from the same streams are currently undergoing peer review. The findings from the analysis are expected to assist DNRP and other environmental managers in identifying actions that can help assess potential management actions, potentially including flow management recommendations. Ultimately, it is expected that one or more of the metrics being evaluated that shows strong correlation with biological response - most likely exhibited in scores for individual invertebrates or for B-IBI overall - could be used to forecast and/or evaluate the hydrologic response of streams subjected to management actions intended to improve flow conditions.

OBSERVATIONS

Not applicable because there are no data.

OUR STRATEGY

By the end of 2005, the normative flow project team will: complete the required statistical analyses; obtain a peer review of the results; develop and implement a performance measure framework with a data collection/analysis work plan and timeline; identify implications for management actions by King County programs; and share results with interested parties.

RATING

No rating this year. A specific target and outcome will be developed for next year's report.

DATA REFERENCE

DNRP Normative Flow Project Team.

17 Percent of salmonid recovery targets achieved

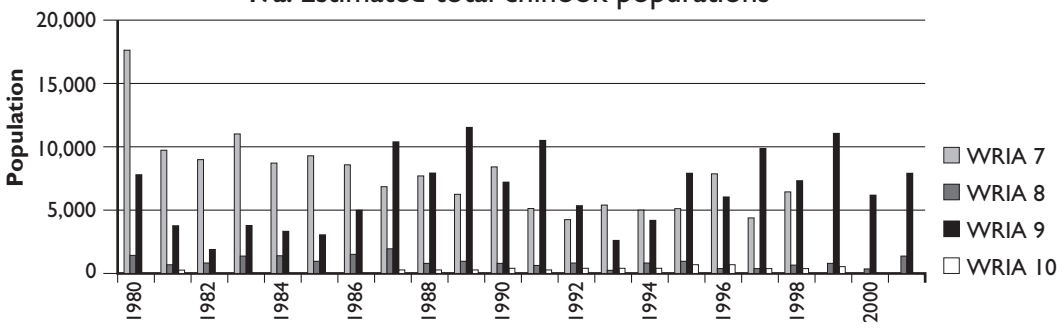
ABOUT THIS ENVIRONMENTAL INDICATOR

Salmonid fish have major cultural, economic and political roles in the Pacific Northwest. However, current populations of many salmonid species are markedly lower than historical levels. In Washington State, fish populations are co-managed by the Washington Department of Fish and Wildlife and the treaty tribes. Each salmonid species in the Puget Sound region has a diverse life history and relies upon a range of habitats for spawning, rearing, feeding and migration. King County has jurisdictional responsibility for many activities, including land use regulation, which influences these habitats. Although King County does not manage fish populations directly, this indicator is based on the abundance of chinook salmon which is partially a function of habitat quality. Fish abundance is an important indicator of the health of the measured species, as well as an indicator of the overall health of marine and freshwater ecosystems.

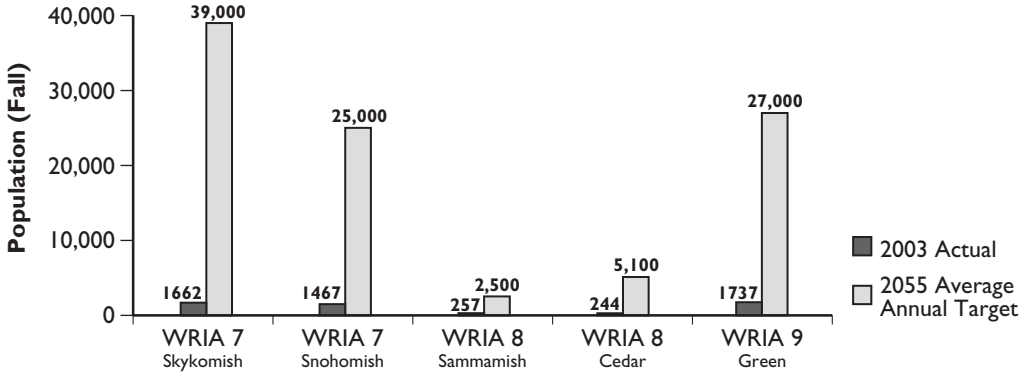
These estimates (Figure 17a) were obtained from the Washington Department of Fish and Wildlife for chinook in each major King County watershed. Although there are many salmonid species in King County, chinook populations are reported here because they cover a broad range of habitats and they are listed as threatened species under the federal Endangered Species Act. Abundance data and long term recovery targets are available for this species (Figure 17b), with the exception that long term recovery targets are not available for the chinook population in the Puyallup/White River watershed.

King County includes all or portions of four major watersheds: the Snohomish (WRIA 7), Cedar/Lake Washington (WRIA 8), Green/Duwamish (WRIA 9) and Puyallup/White (WRIA 10). Recovery goals for chinook salmon that reflect characteristics of a viable salmon population (abundance, geographic distribution, genetic diversity and productivity) were established for these watersheds (with the exception of WRIA 10) in the region through the Puget Sound Shared Strategy.

17a. Estimated total chinook populations

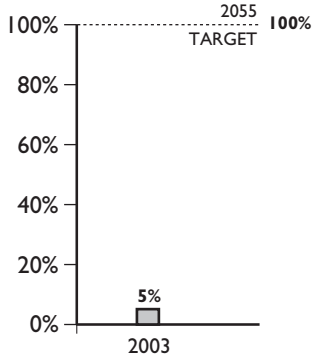


17b. Chinook population targets



OBSERVATIONS

17c. Percent of chinook population reaching 2055 target



Qualitative and quantitative data from the last century indicate an overall decline in the abundance of native, naturally spawning salmon in Puget Sound watersheds. There is annual variation in salmon returns due to natural variability unrelated to human influences, such as ocean conditions. However, the decline in natural-spawning chinook in King County basins is greater than would be expected from natural fluctuations. The impacts of habitat degradation, harvest management, ocean conditions and climatic factors contribute to this fluctuation. It is difficult to determine the relative importance of any single factor that can influence the status of a particular stock. These data show salmon population estimates without attempting to link them to specific factors of population decline. Detailed watershed-specific technical studies and assessments of factors of decline are available on the King County website.

OUR STRATEGY

Interjurisdictional conservation plans to address factors of decline will be completed for WRIAs 7, 8, 9, and 10 and submitted to federal agencies for review in 2005. The plans include actions for meeting long term recovery targets (Figure 17c).

The King County Comprehensive Plan (policies E-169 – E-172) states that the county shall maintain and conserve fish populations, preserve habitat, protect salmonid species listed as threatened or endangered by state or federal governments, and protect the habitat of "Salmonids of Local Importance." Salmonids of Local Importance include the following: chinook, bull trout, kokanee, sockeye, chum, coho, pink, cutthroat, steelhead, Dolly Varden and pygmy whitefish.

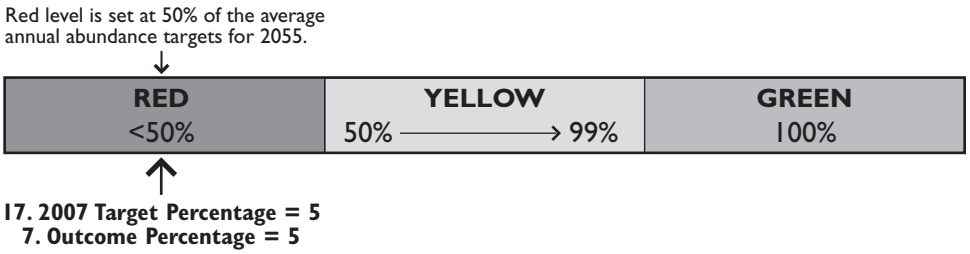
RATING

Results, Target and Outcome

2001 Results:	5 percent
2007 Target:	none
Outcome:	100 percent

Due to the complexity of affixing a schedule to the targets for salmon recovery, this measure does not have a 2007 target. In addition, due to the time lag in collecting and compiling fisheries data, the current measure reports on 2001 salmon population numbers. Future reports will include more updated figures, although the figures will be at least one year behind most of the data presented in the rest of the report. The long term outcome is to recover chinook populations to the average annual abundance targets which are set for 2055.

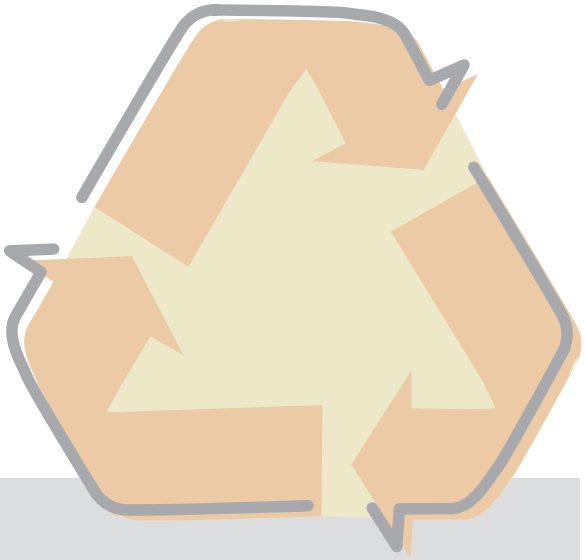
Potential rating scheme



17. 2007 Target Percentage = 5
7. Outcome Percentage = 5

DATA REFERENCE

Chinook population trend data from personal communications and data transfers from the Washington Department of Fish and Wildlife. Chinook population targets derived from co-managers and Technical Review Team for WRIA 7, Washington Department of Fish and Wildlife and Ecosystem Diagnosis and Treatment analysis for WRIA 8, and Washington Department of Fish and Wildlife for WRIA 9.



WASTE TO RESOURCE

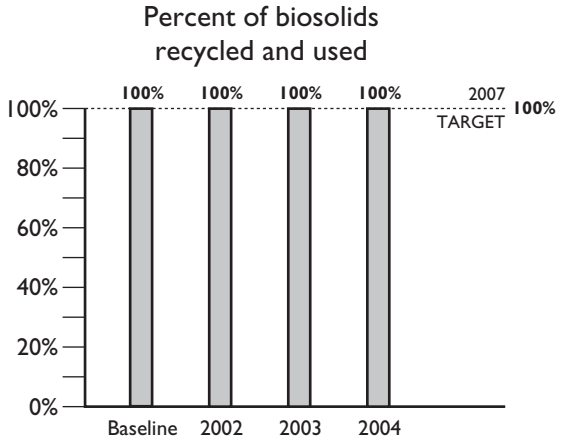
OUTCOME: The amount of waste requiring disposal is reduced

Percent of biosolids recycled and used

18

ABOUT THIS PERFORMANCE MEASURE

Biosolids are the nutrient-rich organic material produced by treating wastewater solids. As permitted under federal and state regulations, biosolids in King County are recycled to improve soils and enhance the growth of forests and agricultural crops. This measure represents DNRP's ability to continue producing biosolids that meet high regulatory standards and to maintain customers and contracts for biosolids by addressing public perception issues that might affect these markets.



OBSERVATIONS

The Regional Wastewater Service Plan (Policy BP-1) states "King County shall strive to achieve beneficial use of wastewater solids." Several projects are underway at the treatment plants to improve biosolids quality and reduce digester problems that will help us maintain this target. Although 100 percent of available biosolids were reused, the measure requires ongoing attention to ensure this high rate.

OUR STRATEGY

The amount of biosolids produced will be decreasing because more efficient dewatering technology has been installed at South Plant. High-solids centrifuges put in place this year will bring annual production from 122,000 tons in 2004 down to 107,000 tons in 2005.

Increased wastewater flows from population growth will be accommodated at the Brightwater Treatment Plant and will lead to increased amounts of biosolids. Brightwater is expected to produce approximately 35,000 tons of biosolids at its startup in 2010.

WTD's strategy for continuing to meet the target of 100 percent biosolids reuse has several components. To maintain public and customer confidence in biosolids quality and management, King County now operates under an Environmental Management System for biosolids, which was nationally certified in 2004. Other strategies include:

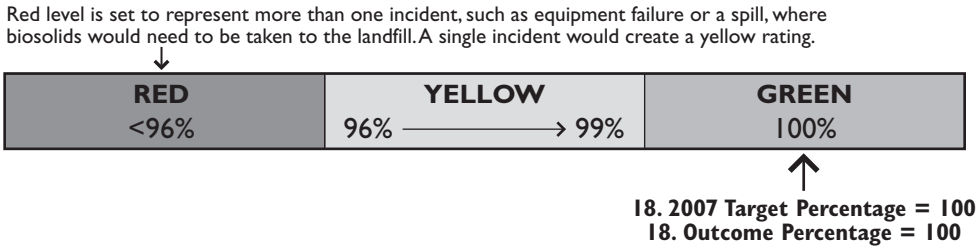
- Ensuring availability of reuse sites for 150 percent of biosolids production.
- Continuing an aggressive industrial pretreatment program to maintain current low metals levels.
- Maintaining an active research and demonstration program that responds to public concerns and identifies potential new uses for biosolids.
- Installing a new influent screening system at West Point to improve capture of debris and to keep undesirable plastics and other materials out of the digesters and the biosolids.
- Investigating Class A technologies and determining which ones would be most appropriate and cost-effective for West Point and South Plant.

RATING

Results, Target and Outcome

2004 Results: 100 percent
2007 Target: 100 percent
Outcome: 100 percent

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

WTD's Balanced Scorecard Report; reports by Supervisor of Technology Assessment and Resource Recovery.

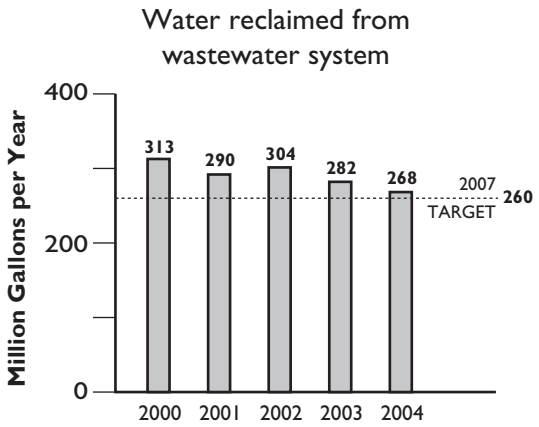
OUTCOME: The amount of waste requiring disposal is reduced

Volume of Water Reclaimed from Wastewater System

19

ABOUT THIS PERFORMANCE MEASURE

Despite our gray and rainy image, King County's surface and groundwater resources are under pressure. One approach to increasing the amount of water available to people and the environment is to use, rather than discharge, treated wastewater for a variety of purposes, such as irrigation, commercial and industrial uses. This in turn can reduce pressure on surface and groundwater supplies so that they can be used for other important beneficial uses such as drinking water or left in the rivers and streams for salmon protection. This measure tracks the amount of wastewater that DNRP converts into a resource.



OBSERVATIONS

In the long term, DNRP's success in converting wastewater into a resource will depend on the cost of providing treatment and conveyance for reclaimed water relative to the cost of utilizing existing sources and/or providing new sources of surface and groundwater. Factors that influence the cost of providing reclaimed water or continuing to use existing sources include more stringent wastewater discharge requirements, closer scrutiny of water rights, more integrated water supply and wastewater planning, and the need to provide water and habitat for salmon recovery. In the short term, higher costs--and the apparent abundance of other, lower-cost supplies--have resulted in low demand for reclaimed water from outside customers. However, both WTD treatment plants continue to reclaim all water needed for their own operations and any needed by customers.

The total volume reclaimed at South Plant declined in 2003 and 2004 for several reasons. The treatment plant reduced their use of reused water in operations. Some of the reduction was due to fixing leaks in the reuse system. Other reductions were due to switching several process/plant areas back to potable water (from reuse water) due to negative impacts from the reuse water (such as corrosion). In addition, one of the reuse water mains serving Fort Dent was removed when the new Starfire Sports soccer complex was built. The fields that were irrigated with reuse water still exist, and Starfire Sports is still interested in getting reuse water to these fields and in expanding their use of reuse water to several more fields. WTD is working with them to determine how to get the reuse water over to these fields.

OUR STRATEGY

The 2004 King County Comprehensive Plan and the Regional Wastewater Service Plan both support the use of reclaimed water to meet the region's water needs. DNRP's goal is to expand the use of reclaimed water where feasible, and produce reclaimed water to match any increase in demand. Reclaimed water will continue to be provided from existing facilities. Brightwater, the new regional wastewater facility, will produce effluent that is essentially reclaimed water quality when it becomes operational; plans are being developed to maximize the reclaimed water use from this plant both along the effluent line and into the Sammamish Valley south of the plant. A satellite reclaimed water plant was planned to be built for the Sammamish Valley by 2005, but was replaced in a cost savings decision with the plan to serve the Sammamish Valley by 2010 with reclaimed water from Brightwater. One major customer--the Willows Run Golf Course--remains under contract with King County to use the reclaimed water from Brightwater when it becomes available.

At the policy level, DNRP will be developing a regional water supply plan that will address the role of reclaimed water in meeting the region's diverse water supply needs. The reclaimed water element of the plan is intended to include multiple tiers for reclaimed water delivery. For example, options include: obtaining reclaimed water directly from a wastewater plant which has already treated water to reclaimed water standards; delivery from an effluent outfall line, after a "polishing" treatment; or delivery from a satellite or decentralized treatment plant connected to the regional wastewater collection system. There may be pilot proposals that DNRP and water utilities or other potential customers may pursue as the plan develops, if such early action opportunities arise. The end result should be an integrated regional supply plan where the role of reclaimed water is clearly described.

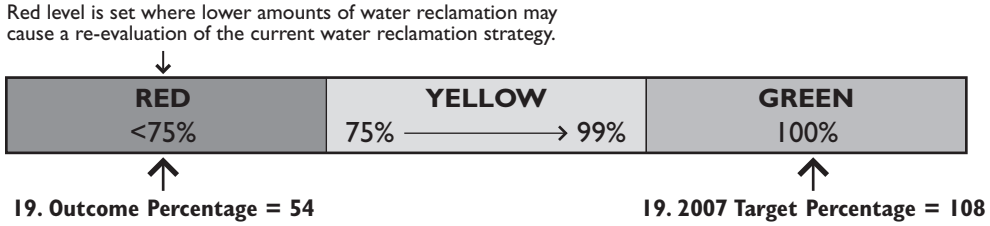
RATING

Results, Target and Outcome

2004 Results: 268 mg/yr
2007 Target: 260 mg/yr
Outcome: 520 mg/yr

The target includes water reclamation from existing wastewater plants only. Last year's 2007 target, of 360 mg/yr, was based on assumptions that included the planned Sammamish plant. The new regional treatment plant (Brightwater), which will serve the Sammamish Valley, will not be operational until 2010. The number and location of existing facilities able to produce recycled water and the number of customers willing to use and pay for reclaimed water limits the target and outcome for this measure. DNRP hopes to increase the long term outcome as a result of the regional water supply planning work.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

WTD's Balanced Scorecard Report; reports by Process Control Supervisors.

OUTCOME: The amount of waste requiring disposal is reduced

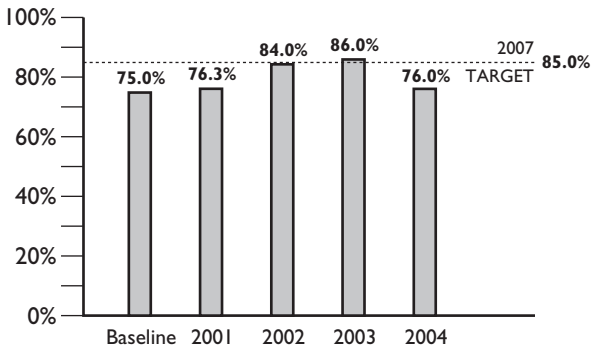
Percent of biogas recycled and used from wastewater treatment facilities

20

ABOUT THIS PERFORMANCE MEASURE

Biogas is a natural byproduct of the wastewater treatment process. Biogas generated at the wastewater treatment plants consists of methane, a significant source of DNRP-generated greenhouse gases (see Measure No. 3 on greenhouse gas emissions) and carbon dioxide. Instead of viewing biogas as a waste or pollutant, it can be captured, processed and burned as a renewable energy resource for our Fuel Cell and Cogeneration units, or scrubbed and sold to Puget Sound Energy at the South Plant, and will be utilized at the West Point Plant for new Cogeneration units and the influent pump engines. This measure ensures that available biogas resources are being efficiently utilized. This measure presents the average amount of biogas utilized at the West Point and South Plant wastewater treatment plants.

Percent of biogas recycled and used from wastewater treatment facilities



Note: Average of the combined rate of the West Point and South plants.

OBSERVATIONS

In 2004, 76 percent of the biogas produced at the county's two major wastewater treatment plants was recycled. Less biogas was recycled in 2004 than in 2003 because of difficulties with the ageing cogeneration facilities at West Point. The West Point staff made a commitment several years ago during the energy crisis to maximize the use of the existing cogeneration units; this effort has been largely successful. However, the age of the units (over 20 years), and the lack of parts resulted in an increased unit failure and down time in 2004. Additionally, West Point's gas recycling efforts rely on the influent pump engines (which are powered by digester gas). The dry weather of 2004 resulted in lower flows, which reduced the amount of digester gas consumed by the influent pumps. Thus, a greater percentage of digester gas was flared.

OUR STRATEGY

WTD's strategy to maintain current performance and meet the 2007 target is to replace the cogeneration facilities at West Point. The new West Point facilities are scheduled for startup second quarter 2007. These units will allow a greater utilization of the

available digester gas and will be both more efficient and have lower emissions than the current units. In the near term, WTD's annual target is set at 75 percent, a number based on West Point staff's assessment of the existing cogeneration plant's capabilities. West Point staff indicate this number will grow to close to 95 percent with the installation of the newer cogeneration units.

South Plant will also be going through various changes in energy due to be online by September 2005 (such as a new boiler, fuel cell and cogeneration turbines). However, these facilities are not expected to significantly change the percentage recovery achievable at South Plant. Instead, these new facilities are focused on reducing our vulnerability to the energy markets.

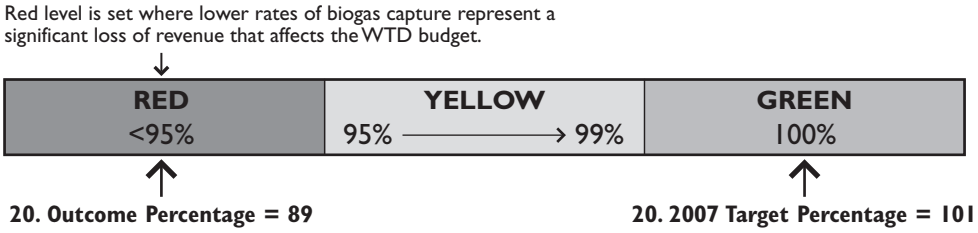
RATING

Results, Target and Outcome

2004 Results: 76 percent
2007 Target: 85 percent
Outcome: 85 percent

The 2007 target is based on the application of new technology in that year. The target up until 2007 is 75 percent. The measure will be rated on the 75 percent target until 2007 when the new technologies are designed to be in place. The 2007 target and outcome are based on the maximum, cost effective amount of biogas obtainable.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

WTD's Balanced Scorecard Report; reports by Process Control Supervisors.

OUTCOME: The amount of waste requiring disposal is reduced

Percent of methane produced by Cedar Hills landfill that is converted to usable energy

21

ABOUT THIS PERFORMANCE MEASURE

In the natural decay process of landfill material, gases such as methane and carbon dioxide are produced. About 52 percent of landfill gas is made up of methane, which can be turned into usable energy. In an effort to capture existing "wastes" and use them as resources, SWD plans to develop a methane capture and energy conversion facility.

OBSERVATIONS

Current practice at Cedar Hills is to burn-off the accumulated gases; therefore zero percent of the methane produced at the Cedar Hills Landfill is being converted to usable energy. The current goal is to begin energy production in late 2008 or early 2009, which is anticipated to bring the methane conversion rate to 90 percent.

The contract to build and operate this project has been awarded to Energy Developments Inc. (EDI) of Houston. EDI has experienced significant delays in equipment procurement. They have also had difficulty in negotiating a power purchase agreement due to local market conditions. This has resulted in a nearly two year project delay. In response to this delay, SWD is developing new primary milestones with specific deadlines for performance and penalties for failure to perform. This schedule will become an amendment to the contract.

OUR STRATEGY

The main task required to be accomplished by the division to facilitate the project: assist EDI with permitting their facility. This action will be initiated based on EDI's development schedule.

RATING

This measure will not be rated until the required infrastructure is installed.

Results, Target and Outcome

2004 Results: not applicable
2007 Target: 0 percent
Outcome: 80 percent

The target has been reduced to zero, given the time delays associated with the project. New targets for 2008 (40 percent) and 2009 (80 percent) reflect the system coming online. The outcome for this measure, at 80 percent, is based on expected recovery rates once the energy-producing gas turbine goes online. The target includes equipment down time for expected maintenance; gases will be burned-off during these projected down times.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings

Red level is set where there are any exceedances from the existing design standard.

RED	YELLOW	GREEN
<99%	99%	100%

DATA REFERENCE
SWD

OUTCOME: The amount of waste requiring disposal is reduced

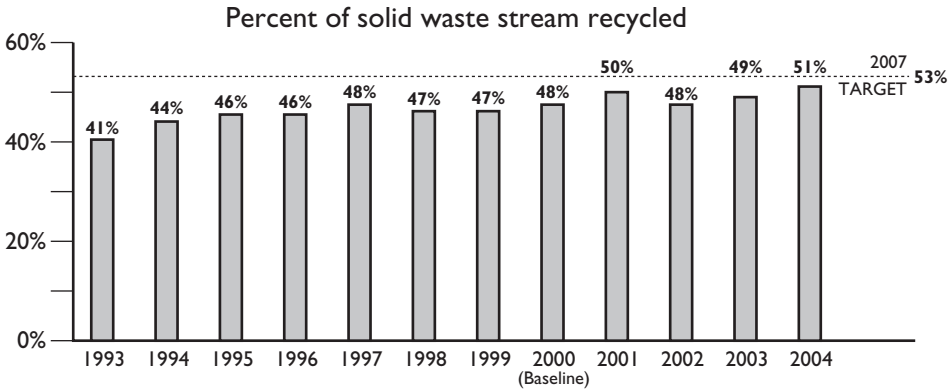
Percent of single-family curbside solid waste stream that is recycled

22

ABOUT THIS PERFORMANCE MEASURE

Recycling programs are important because they encourage residents to generate less waste and maximize the beneficial use of materials. In King County, recyclable materials collected are glass, tin, aluminum, plastics, newspaper, mixed paper and corrugated cardboard. Yard waste is also collected and considered as recycled material in this measure.

This measure, focused on the single-family recycling rate, is calculated by taking the annual tonnage of recyclables (including yard waste) collected from single-family households through curbside programs divided by total tonnage collected from all single-family households receiving curbside service, which includes recyclables, yard waste and garbage.



Single-family Curbside Recycling Rate

OBSERVATIONS

In the past several years, single family recycling rates have hovered around 50 percent. This year, for the first time, the rate has reached 51 percent. In December 2003, the King County Council enacted an ordinance requiring that new materials – including metals and additional plastic containers – be collected in curbside recycling programs in unincorporated areas. Haulers serving most unincorporated areas and cities where collection is regulated by the Washington Utilities and Transportation (WUTC) also had an incentive to enhance their recycling efforts because of state legislation. These haulers are allowed to retain a percentage of revenues from the sale of curbside recyclables if they implement county-approved plans to enhance recycling. Approved plans included educational campaigns by the haulers to increase participation. In many areas, a new "single stream" collection system was launched, making it easier for residents to recycle by combining all recyclables in one large wheeled cart. Additionally, several cities that contract directly with haulers have also switched to single-stream recycling and expanded the types of materials they are collecting to include food waste, textiles and certain electronics.

Although all these factors have contributed to the increase in the recycling rate, there are a number of other factors independent of SWD programs that affect the rate.

Annual rainfall and temperatures directly affect the volume and weight of yard waste put out at the curb. Economic growth and jobs can also affect the rate. Therefore, a recycling rate could fall (as it did in 2002) or remain the same as a prior year even if participation in recycling programs increases.

Despite these slight fluctuations, King County's recycling rate is very high. The national residential recycling average rate in the United States is estimated to be about 30 percent. Comparing recycling rates with other jurisdictions is complicated by the lack of a uniform methodology. Some jurisdictions, such as the City of Seattle, include multi-family recycling and backyard composting in their overall rate. This yields a very high recycling rate of 57 percent. Other jurisdictions include construction and demolition recycling in their rate.

King County currently uses the single-family recycling rate as a performance measure because reliable data on multi-family and non-residential recycling are not available. Additional information related to this measure is discussed in the "Waste Reduction, Recycling, and Market Development" chapter of the 2001 King County Comprehensive Solid Waste Management Plan.

OUR STRATEGY

To improve the information we have on the amount of recyclables collected from multi-family and non-residential accounts, the division is working with a consultant and the Washington State Department of Ecology (DOE) to develop a predictive model. The model will estimate missing quantities of recyclables in order to "smooth" the DOE's annual estimates and fill in gaps to mitigate the substantial deviation in year-to-year recycling reported by the DOE. The division expects to the model to be completed by mid-2005. Additional information may be gained by asking cities that already track multi-family recycling and by seeking additional sources of data on commercial recycling.

The division continues to pursue a "Zero Waste of Resources by 2030" goal. We have organized programs with a target of "zeroing out" key materials that remain in the waste stream but that have value in the recycling marketplace. Target materials for 2005 include food waste, electronics, paper, and wood.

Food Waste: As a result of several successful food waste collection pilot projects conducted in 2002-2003, several cities have added food waste to citywide yard waste collection starting in 2004. SWD will continue to work with haulers to extend food waste collection with yard waste in unincorporated areas and other cities. A commercial food waste collection pilot also started in 2004. The program is testing the feasibility of collecting food waste from commercial establishments and the operational challenges that this material presents. To date, this program has diverted about 200 tons from the landfill.

Electronics: SWD is pursuing a "product stewardship" approach to the collection and recycling of electronic products. Product stewardship shares the responsibility for handling a product at the end of its useful life with the parties that have designed, produced, sold or used the product. This approach saves local governments money by sharing the collection and recycling costs with parties that have benefited from the sale and use of the product. This is especially effective when the product in question contains hazardous materials and should be properly recycled or handled as a hazardous waste, which is considerably more expensive than traditional recycling.

SWD developed and currently coordinates a private sector electronics recycling network called the "Take it Back Network" to collect and recycle electronic products for a fee.

Paper and wood: In 2005, the division will be analyzing program options for zeroing out these valuable resources from the waste stream.

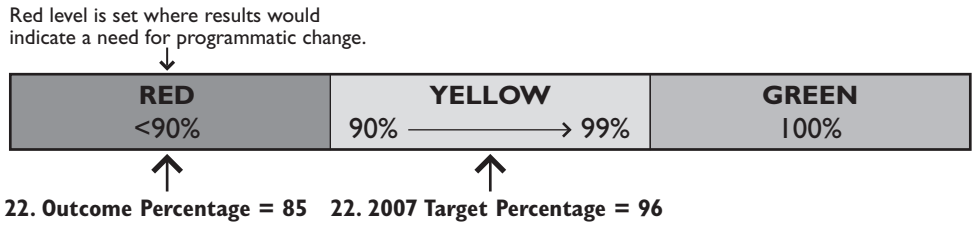
RATING

Results, Target and Outcome

2004 Results: 51 percent
2007 Target: 53 percent
Outcome: 60 percent

With changes in the collection system (single-stream recycling) and additional materials starting to be recycled (food and soiled paper), the division adjusted the original 2007 (5-year) target of 50 percent, originally set in 2002. The target was adjusted to better reflect the "Zero Waste of Resources 2030" guiding principle that is a part of the 2004 Solid Waste Business Plan.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

Private hauling companies' collection activity reports; 2001 King County Comprehensive Solid Waste Management Plan; Department of Ecology's annual recycling survey; SWD Waste Monitoring Program surveys; SWD's tonnage records.

23 Amount of solid waste being disposed per resident or employee

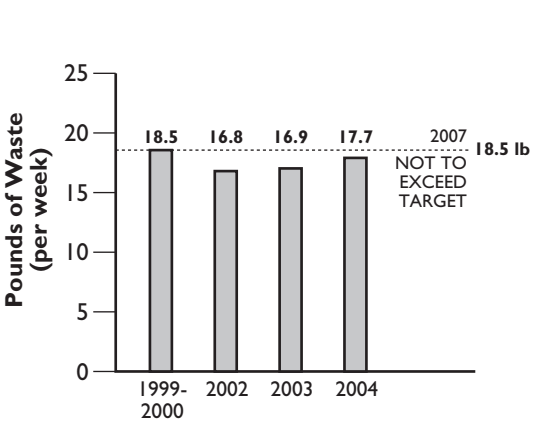
ABOUT THIS PERFORMANCE MEASURE

This measure focuses on waste disposal practices by residents and employees. The measure integrates waste reduction and recycling efforts by tracking the impact of both desired behaviors on the amount of waste that actually goes into the garbage can. By contrast, the single family recycling rate (Measure No. 22) only measures progress in recycling, not waste reduction.

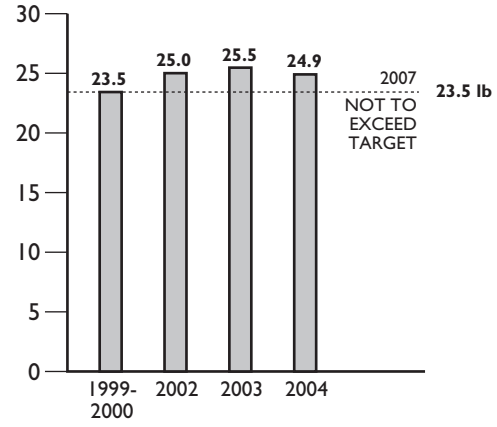
It should be recognized that waste disposed is a direct function of the degree of consumption (the more you consume, the more you'll need to dispose at some point in time). Consumption patterns for both residents and businesses are fueled by economic conditions. Therefore the state of the economy has a huge influence on waste disposal regardless of programmatic efforts by SWD designed to minimize disposal.

This measure tracks residential and non-residential waste disposal activity separately; this is important because factors affecting residential disposal can differ from those affecting non-residential disposal. In addition, strategies to address each of these segments are different. In contrast to most other measures in the report, these targets are considered "not to exceed" targets where we want to be under, rather than over, the targets.

Waste disposed per resident or employee



23a. Resident



23b. Employee

OBSERVATIONS

Data for 2004 indicate per capita disposal for residents going up and for employees going down. It is very difficult to draw conclusions regarding SWD performance from this annual data. A negative trend with residential disposal and positive trend in employee disposal may be linked to the recent uptick in economic growth where residents consume more goods thus creating more waste, and businesses hire more employees thus a per capita rate would decline.

Additionally 2004 was a year in which the solid waste system saw major changes which could have skewed the data. The north end transfer station saw additional tonnage enter the system as some waste normally disposed of in Snohomish County was delivered to King County due to a facility closure.

Additionally, the split between residential and non-residential garbage tonnage disposed is based on a survey that was carried out mid-2002 to mid-2003 when the garbage from non-residential sources was probably lower than in 2004.

In 2000, for the United States as a whole, the average amount of waste disposed was 22.4 pounds per capita per week. This per capita number, which is currently used as a benchmark for this performance measure, is not strictly comparable because it assigns all disposed waste – both residential and commercial – to residents. This methodology makes no allowance for the vast differences in waste disposal between commercial centers such as the Puget Sound area and rural areas with little commercial waste. And as noted above, different strategies are needed to encourage reduced waste disposal for residents and for businesses.

Waste generation increases with population, economic growth, and employment due to increases in production and consumption. Maintaining existing waste disposal levels will require a significant level of effort. Reducing the amount of waste hinges on aggressive waste reduction and recycling practices such as expanded education, promotion, incentives, policy and regulatory changes, technical assistance programs, and expanded promotion of existing material exchanges and reuse centers.

OUR STRATEGY

Several programs focus on waste reduction strategies to reduce the amount of waste. Programs such as "Waste Free Holidays" encourages purchasing gifts of experiences, "Backyard Composting" limits the need for off-site yard waste management, and various school education programs teach youth about reducing waste and reusing materials. The "On-line Materials Exchange" encourages the posting and purchase of numerous household items on the web for reuse and recycling, thereby reducing the need for new consumption.

RATING

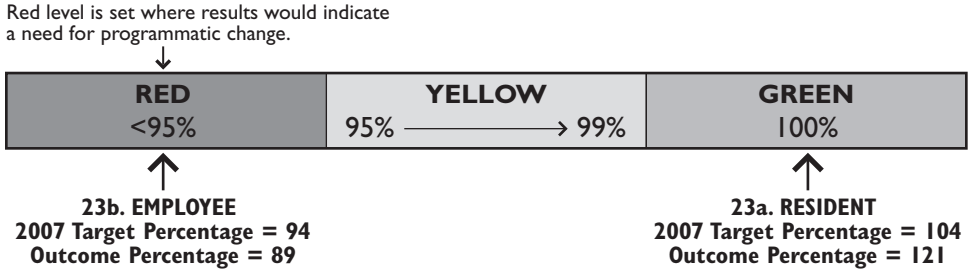
Results, Target and Outcome

23a. Resident
2004 Results: 17.7 lbs of waste/week
2007 Target: 18.5 lbs/week
Outcome: 22.4 lbs/week national average = Benchmark

23b. Employee
2004 Results: 24.9 lbs of waste/week
2007 Target: 23.5 lbs/week
Outcome: 22.4 lbs/week national average = Benchmark

The targets are based on the 2001 Solid Waste Comprehensive Plan. The targets are meant to ensure that the amount of waste does not increase. The targets assign waste generated by residents to residents, and waste generated by businesses to employees. The benchmark is not directly comparable with the targets because the benchmark assigns all waste generated to residents. The target and outcome for these measures may be revised as the division begins a new comprehensive plan in 2006.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

King County Monitoring Program: 2002/2003 Comprehensive Waste Stream Characterization and Transfer Station Customer Surveys – Final Report, April 2004; Office of Financial Management: April 1 Population of Cities, Towns, and Counties Used for Allocation of Selected State Revenues State of Washington; Washington Sate Employment Security: Nonagricultural Wage and Salary Workers Employed in King County; Municipal Solid Waste in the United States: 2000 Facts and Figures, EPA.

OUTCOME: The amount of waste requiring disposal is reduced

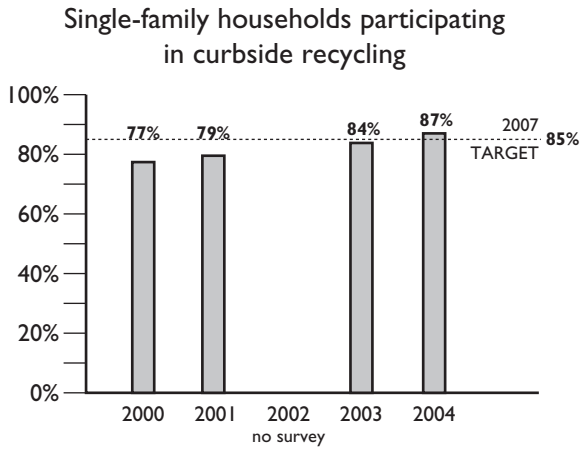
Percent of single-family households in King County (excluding Seattle) participating in curbside recycling

24

ABOUT THIS PERFORMANCE MEASURE

This measure is designed in conjunction with the percent of single family curbside waste recycled measure (No. 22) and the waste disposal measure (No. 23). Together, these measures assist the division in understanding the impacts of recycling education programs, recycling availability, and rate incentives for solid waste collection that encourage participation in recycling programs. Maximizing participation in curbside recycling programs makes efficient use of the existing collection system and reduces the use of self-haul capacity at King County transfer stations. Increased participation in recycling programs also will reduce the amount of solid waste disposed and move the county closer towards is Zero Waste of Resources goal.

"Single-family households" include single-family homes and buildings with four units or less. Seattle is not included because it is not part of the King County service area.



OBSERVATIONS

The percent of single-family households participating in curbside recycling increased from 84 percent to 87 percent since 2003. Participation levels may have risen due increased educational efforts to sign up customers. As described in Measure No. 22, new state legislation has incentives for garbage hauling companies to enhance their recycling efforts. They are allowed to retain a percentage of revenues from the sale of curbside recyclables if they implement county-approved plans to enhance recycling. Additionally, participation may be on the rise due to the recent switch to single-stream recycling and expanded types of materials being collecting to include food waste, textiles and certain electronics. In many areas, a new "single stream" collection system was launched, making it easier for residents to recycle by combining all recyclables in one large wheeled cart.

Curbside recycling service is available at no additional charge to single family households that subscribe to garbage collection service in all of King County except the cities of Pacific and Skykomish, and Snoqualmie Pass and Vashon Island.

OUR STRATEGY

SWD continues to coordinate with haulers to provide information to households on how to recycle. In 2005, a greater focus will be placed on multi-family recycling, where recycling rates are not as high. Barriers to higher rates of recycling participation in multi-family units include space constraints and lack of interest from building management. The division will implement a series of focus groups to better understand these barriers and identify options to improve recycling options and participation.

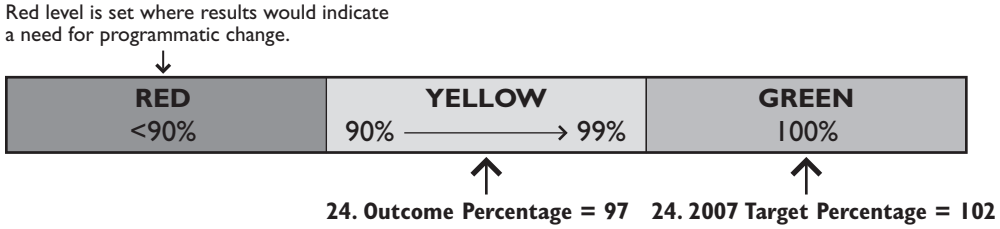
RATING

Results, Target and Outcome

2004 Results: 87 percent
2007 Target: 85 percent
Outcome: 90 percent

The long-term outcome is based on SWD's goal of 90 percent participation.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

"Waste Reduction, Recycling, and Market Development" chapter of the 2001 King County Comprehensive Solid Waste Management Plan; King County Solid Waste Division Residential Waste Reduction and Recycling Survey 2005.

COMMUNITY INVESTMENT

OUTCOME: Residents are more involved in their communities and in protecting the environment

Percent of county residents engaged in positive behaviors related to household hazardous waste

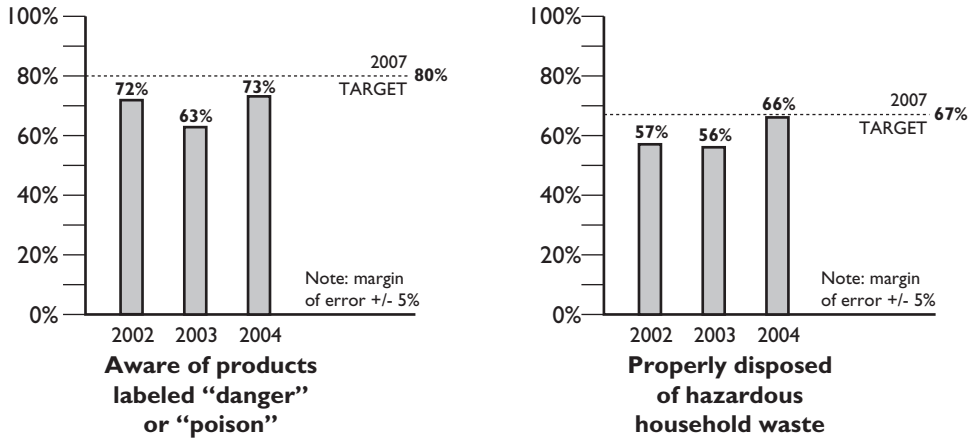
25

ABOUT THIS PERFORMANCE MEASURE

Collectively, we as individuals can have a major impact on the environment. Nonpoint sources of pollution, small contributions of pollution from multiple sources, such as runoff from urban areas, are currently thought to be the primary cause of water quality degradation in the Puget Sound region. Household hazardous waste can have significant impacts on surface, marine, and groundwater quality. DNRP is an active participant in the multi-agency Local Hazardous Waste Management Program in King County. The program has conducted numerous public information campaigns to raise awareness of the problem and encourage appropriate behaviors. Collection services, such as the department-operated Wastemobile, accept household hazardous wastes rather than have them be improperly disposed of in landfills, the sewer system or storm drains.

There are two resident activities that are of primary interest because they represent the "front end" educational efforts and "back end" collection effort related to household hazardous waste: 1) awareness about products labeled with danger or poison and 2) properly disposing of household hazardous waste at a collection center. This measure is meant to track the degree to which public information and education efforts are having an impact on resident behaviors related to household hazardous waste disposal.

Percent of county residents engaged in positive behaviors related to household hazardous waste



OBSERVATIONS

The proper behaviors for both label awareness and household hazardous waste disposal are widely accepted and practiced by many residents. However, even limited amounts of these products dumped into storm drains or improperly disposed of can have serious environmental impacts. The increase in both measures reflects ambitious targets. A change in one percentage point, as represented by these surveys, equals

47,000 residents. In addition, 80 percent acceptance of a specific behavior is considered an upper-limit bracket.

Although a high percentage of survey respondents reported going to household waste collection centers, a respondent who answered that they did not go to such a center is not necessarily doing anything wrong as they may not have had any hazardous waste requiring disposal. In fact, these survey respondents may have learned to use less hazardous or non-hazardous alternatives to hazardous products and wastes which must be disposed at hazardous waste collection centers.

OUR STRATEGY

As part of the Local Hazardous Waste Management Program, a wide variety of activities help to raise awareness about hazardous products and services to safely handle them. One of the main pages on the program's new website (*http://govlink.org/hazwaste/house/products/index.html*) highlights the "read the label" message. Similar label-reading and signal-word messages are communicated in the school classrooms, reaching more than 5,000 students throughout King County each year, and in the Wastemobile customer-greeters/educators program, which has brief, direct contact with approximately 15,000 customers per year.

Program participants are focusing on mercury-containing products for special attention. Activities include a pilot retail-based collection program for household fluorescent lamps, increased publicity around mercury-containing thermostats and vehicle switches, and public and business efforts to recycle fluorescent lamps. All of these projects should increase the general public's awareness that certain household products contain mercury, a high priority hazardous chemical.

In addition, program participants are gearing up a new emphasis on children's environmental health issues, including public service announcements on Mariners' baseball games, direct contacts with daycare centers, training parents of new or young children, and other ways to get the message out regarding hazardous products, safety, signal-words and reading the label. All of these efforts should reinforce our basic message and result in increased awareness, even in a time of reduced public education and outreach budgets.

SWD continues to provide Household Hazardous Waste collection service at the Factoria Transfer Station and upgraded the facility in October 2004 to increase the working space. The permanent facility continues to be more cost effective and more convenient to residents in comparison to the Wastemobile. In December 2004, a new educational information display rack was designed to offer Factoria customers flyers and brochures about waste reduction, handling household hazardous wastes, and other waste related issues.

In addition to the above strategies, DNRP developed in 2004 a more definitive survey approach that will more clearly define different behaviors and the percentage of the population that are doing the desired activities. Based on social marketing theory, the survey will characterize King County residents and will be used to develop a behavior index. This new survey will be conducted during 2005 and results from that survey will impact both the content and design of this measure.

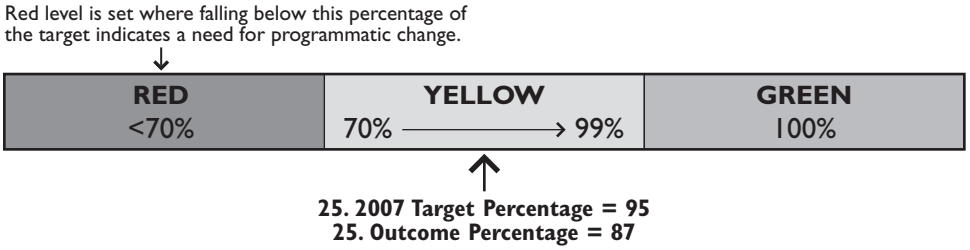
RATING

Results, Target and Outcome

2004 Results: 73 and 66 percent of residents: average of 70 percent
2007 Target: 80 and 67 percent of residents: average of 74 percent
Outcome: 80 and 80 percent of residents: average of 80 percent

The targets are based on continued public information campaigns, incentive programs, and other services to increase the percentage of the population adopting the positive activities. The ultimate outcome is that a large majority of residents, 80 percent, will practice these positive behaviors. The nature of this measure, focusing on changing resident behaviors, requires a long time to attain desired outcomes.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

King County DNRP Water Quality Survey, December 2004; Natural Yard Care and Associated Environmental Practices: Annual Polling Data and Behavioral Trends Analysis, 1997-2003.

OUTCOME: Residents are more involved in their communities and in protecting the environment

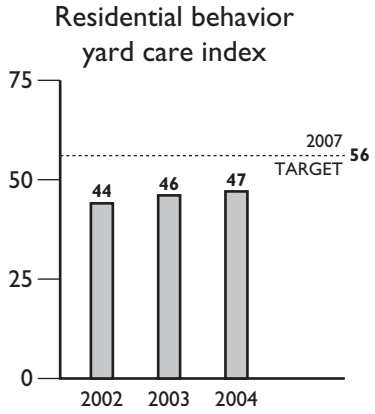
26 County residents engaged in positive behaviors related to yard care

ABOUT THIS PERFORMANCE MEASURE

Products used by residents in their yards can have either a positive or negative impact on human health and the environment. Residents can have a positive impact on the environment by practicing natural yard care. This includes improving soil, using mulch, planting native and/or pest-resistant plants, reducing use of pesticides and chemical fertilizers, and using water conscientiously. Pesticides (including herbicides) and fertilizer all pose risks to public health and environmental quality, particularly streams and salmon populations.

Recent research findings show the negative human health and environmental impacts from yard care practices. Studies conducted by the National Institutes of Health show increased health risks in families that regularly use lawn and garden pesticides. Homeowners often use five to ten times more chemicals per acre on their lawns than farmers use on agricultural land. Compacted soil leads to run-off from yards carrying water and garden pesticides into the regions waterways through storm sewers and groundwater percolation. The U.S. Geological Survey found evidence of 23 pesticides used by homeowners in urban streams.

Because we want to assess a variety of actual yard practices, this measure is designed as an index. The index takes the average percentage for six desired yard care practices and one belief statement from a survey of King County residents. The index includes the percent of King County residents who: watered their lawn for 30 minutes or less, if they watered; did not use weed and feed-type products; leave grass clippings on the lawn most of the time; choose plants to attract beneficial insects or to reduce water or chemical use; use compost; and are concerned about the impact of their lawn care practices on the environment. All of these practices are tied to specific program messaging as described in the Our Strategy section below.



OBSERVATIONS

Overall, the index has gone up gradually since 2002. However, when looking at individual index elements there have been both notable increases and decreases. Compost

GOALS

Environmental Quality

Waste to Resource

Community Investment
Contribute to healthy communities by providing recreation, education, and sound land management.

Leadership

Price of Service

Customer Satisfaction

Employee Involvement and Morale

use has gone up consistently from 49 percent in 2002 to 58 percent in 2004. People saying they do not use weed and feed products has also gone up from 58 percent in 2002 and 2003 to 69 percent in 2004. There was an increase in the percentage of the population who left their grass clippings on the lawn (up from 33 percent in 2002 to 48 percent in 2003 and down somewhat to 44 percent in 2004). The percent of people who thought about chemical and water use when making plant choices also went up.

Counterbalancing those increases however were declines in both appropriate water use and concern about lawn care practices. Given the margin of error for each individual survey question, most of these questions did not have statistically significant differences (except for the weed and feed question which did show a significant increase). The previous years' index scores have been slightly changed because the calculation for water usage was made more precise by capturing both the number of times per week someone watered as well as the length of time they watered.

OUR STRATEGY

There are a wide variety of strategies the department uses to educate the public about yard care practices. The department participates in two specific programs that educate residents about the positive actions they can take as well as the negative environmental impacts from certain yard care practices. Both programs encourage following a five-step plan for healthy gardening:

1. Build healthy soil with compost and mulch
2. Plant right for your site
3. Practice smart watering
4. Think twice before using pesticides
5. Practice natural lawn care.

The individual elements in the yard care index reflect each of the five steps. The five-step approach was developed collaboratively with other jurisdictions and adopted for use in all educational outreach.

In its first five years, what was called the Natural Lawn Care approach used expensive media advertising to spread the message about key behaviors. Awareness about the behaviors grew exponentially but behavior change did not. For the last four years, the Natural Yard Care Neighborhoods program has been using a community-based social marketing approach to target individual communities, train them in the techniques of natural yard care, and let them spread the word. It has been very successful at a fraction of the previous cost and is holding awareness levels high while changing the behaviors of nearly everyone who takes the training. Sixteen neighborhoods have already been trained and from 10 to 13 are planned for every year. Research has shown that natural yard care behavior changes adopted after this program tend to be permanent, which would imply that the rates should stabilize or increase. In addition, the people practicing desired behaviors tend to share their knowledge of these behaviors with five other people.

The second program, Northwest Natural Yard Days, is a public/private partnership between regional public agencies and retailers to discount natural yard care products accompanied by strong educational messages. The program began in King, Pierce and Snohomish counties in 1998 as a discounted mulch mower sales campaign at special events and has transitioned into an all-retail program with discounts on mowers and other products such as organic fertilizer, compost, hand weed pullers and soaker hoses. There has been between 33 and 40 participating retailers. In 2004, retailers in Whatcom, Kitsap, Skagit, and Thurston counties joined the partnership.

Other outreach has included participation in the annual Northwest Flower & Garden show and providing information to local garden writers who produce news articles, garden columns, and radio and TV programs. For example, Ciscoe Morris, a popular gardening expert, promotes natural yard care and has been a spokesperson for healthy gardening.

Lastly, a recent Federal District court ruling prohibits use of some pesticides near salmon-bearing water and requires labeling these products at the point of purchase. This may have a future dampening effect on residential purchases.

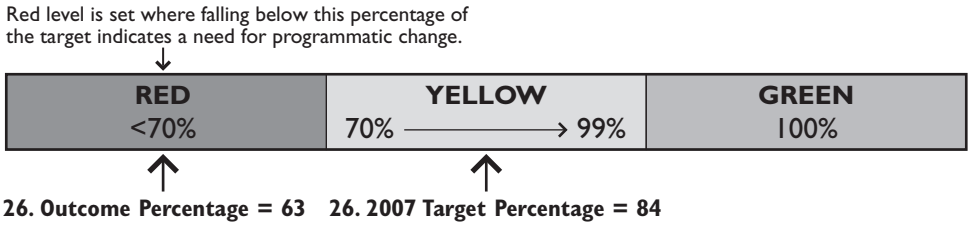
RATING

Results, Target and Outcome

2003 Results: 47
2007 Target: 56
Outcome: 75

The overall yard care target and long-term outcome were derived by setting targets for each of the seven component questions and then taking the overall average score. Where multiple programs across the department have similar desired outcomes, the target and long-term outcomes were higher. However, there are a number of factors as to why the long-term desired outcome of the yard care index is not 100. For example, the compost outcome was set at 75 percent because that is sufficient to sustain the compost creation process. Similarly, although leaving grass clippings on the lawn is a desired behavior, the outcome was set at 75 percent because some residents may also do alternative appropriate behaviors, such as using yard waste collection and doing their own composting. The nature of this measure, by focusing on changing resident behaviors, requires a long time to attain desired outcomes.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

King County Natural Yard Care and Associated Environmental Practices: Annual Polling Data and Behavioral Trends Analysis, 1997-2003. Healthy Soil Survey 2003: Final Survey Results. King County Solid Waste Division Waste Prevention & Recycling: Evaluation of the Residential Education & Promotion Program, 1997 – 2003.

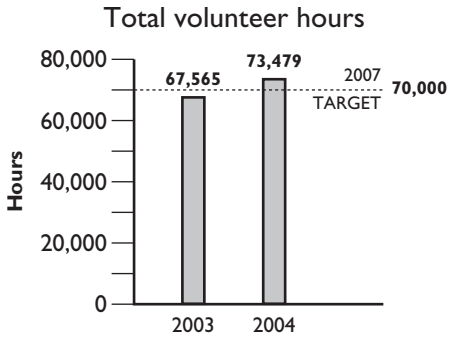
OUTCOME: Residents are more involved in their communities and in protecting the environment

Number of volunteer hours invested in Parks Division projects

27

ABOUT THIS MEASURE

Parks and recreation is one area of government that generates significant volunteerism. People volunteer on King County Parks' projects as a way to invest in the community, educate park visitors, and provide basic enhancements to the park system and the environment. The degree of community involvement with the King County parks system is an important measure of how engaged the community is with this important public asset.



OBSERVATIONS

The division provided opportunities for youth and adults to participate in a variety of natural resource projects, recreation and aquatics programs, services, and special events in parks, natural lands, and in parks facilities. Volunteers enhance division services in a variety of ways--by providing additional projects and programs without additional expense, supplementing staff's efforts, and promoting citizen understanding of and assistance with park services, challenges and issues.

King County Parks has a strong volunteer base built over many years. Given the division's reorganization, recent transfers of parks and pools to cities, and the elimination of numerous recreation programs, the 2003 total volunteer hours level was used to establish the new baseline level of involvement.

In the division's Regional Parks, Pools, and Recreation Section, 4-H adult and youth volunteers contributed 30,000 hours at the King County Fair in Enumclaw. Adult volunteers worked with teen participants at the White Center Park Teen Program in areas ranging from photography, racquetball and cooking instruction to graphic design support for a teen poetry magazine. Volunteers donated more than 50 hours of service at the Parks Information booth during the Marymoor Concert Series and the King County Fair.

In the division's Parks Resource Section, 231 volunteer projects were completed on King County Parks and Natural Lands. Over 4,365 volunteers provided more than 23,394 volunteer hours for Park's Resource Coordinators on restoration projects and trail work. Over 25,000 tree and shrub seedlings were "potted up" at the King County

Greenhouse and Nursery using volunteers.

Projects involved both individuals and groups including businesses such as Boeing, Microsoft, Starbucks, Sterling Savings Bank, Bank of America, and PACCAR. Youth groups, student groups from colleges and universities, community service clubs including Rotary and Lions participated in a variety of volunteer projects. Mountains to Sound Greenway, Washington Trails Association, Volunteers for Outdoor Washington and the Washington Native Plant Society provided partnerships with their members volunteering on King County sites.

Adopt-A-Park groups were active in 2004 with S.O.D.A. (Serve Our Dog Areas) contributing 3,632 hours for the year. The Washington Native Plant Society continued its work on the Redtown Meadow Project at Cougar Mountain and is planning to lead volunteer events at the site in 2005.

Another way to assess the value of volunteer contributions is to identify an in-kind value for each volunteer hour. Although expert volunteers can be valued at their market rate, for simplicity, using a standard estimate of $17.41 per hour for Washington volunteers yields a volunteer community investment equivalent of over $1.25 million.

OUR STRATEGY

The division believes it is important to continue enhancing the volunteer program. There is one staff member committed to creatively increasing volunteer opportunities and our volunteer base. A system-wide volunteer database will be updated and used to efficiently track volunteer hours, produce reports, and archive valuable information on user groups and park investment.

In 2005, the division will continue to focus on increasing volunteer opportunities in aquatics, at the fairgrounds, and in recreation, as well as supporting and expanding volunteer projects in parks and natural lands on a project-by-project basis.

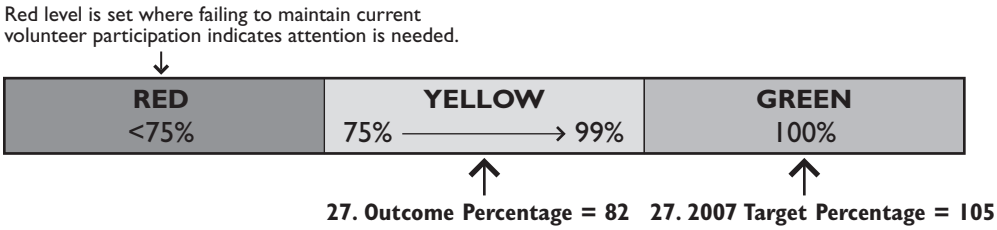
Future evolution of this measure may include a more comprehensive measure of volunteer contributions across the entire department. For example, additional volunteer efforts support WLR programs related to native plant salvage, noxious weed removal, lake monitoring, salmon monitoring, storm drain stenciling, and naturalists for beaches and the Cedar River.

RATING

Results, Target and Outcome

2004 Results: 73,479 hours
2007 Target: 70,000 hours
Outcome: 90,000 hours

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

Parks Resource Section; Independent Sector Value of Volunteer Time (*www.independentsector.org/programs/research/volunteer_time.html*)

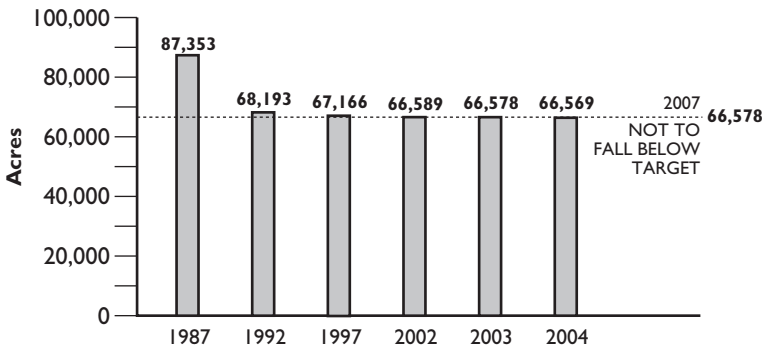
28 Acreage of agricultural land in King County

ABOUT THIS INDICATOR

DNRP has an interest in preserving farmlands primarily for the environmental benefits they provide compared with developed land. Open farmland contributes significantly less runoff than developed impervious surfaces, it provides surface water storage during the wet season, and it facilitates groundwater recharge. However, due to a number of socio-economic forces, such as the economic viability of small farms and rising land values for development, there has been a dramatic loss of agricultural land in the county over the last 50 years.

This measure relies on a baseline of agricultural properties established in 2002. DNRP has identified 66,589 acres used for agriculture within the county. This includes 41,295 acres within the county designated agricultural production districts and 25,294 acres in the remaining rural area. These properties are used for either horticulture or livestock, and include small hobby farms. DNRP will monitor development permits at the King County Department of Development and Environmental Services to know whether any of these parcels are being developed for non-agricultural use, and conduct a comprehensive field survey every four to five years.

Acres of agricultural land in King County



OBSERVATIONS

In 2004, no acreage was lost to development and only nine acres were lost to the creation of a wetland. Historical data were generated using U.S. Department of Agriculture data for properties filing farm profit/loss statements. Since this is a smaller subset of properties than is being tracked by DNRP, the historical data was extrapolated for previous years. This is considered a conservative estimate by program staff and probably underestimates the loss of agricultural land in past years. An update of the Department of Agriculture data in 2004/2005 will improve the accuracy of this estimate.

OUR STRATEGY

The Office of Rural and Resource Programs plans to maintain the comprehensive plan "no net loss of farmland" policy. Provide marketing assistance to farmers through the "Puget Sound Fresh" farm products marketing program to maintain the economic viability of small farm operations; and continue to work toward a regulatory environment that fosters agriculture and agribusiness in King County.

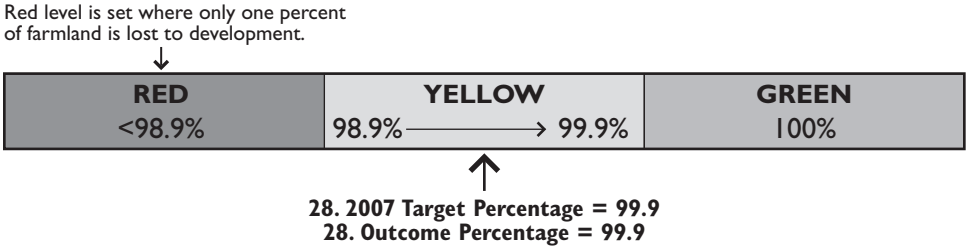
RATING

Results, Target and Outcome

2004 Results: 66,569 acres
2007 Target: 66,578 acres
Outcome: 66,578 acres

The 5-year target and long term outcome is zero loss of acreage to development.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP's Office of Rural and Resource Programs; USDA Natural Resources Conservation Service; King County Department of Development and Environmental Services.

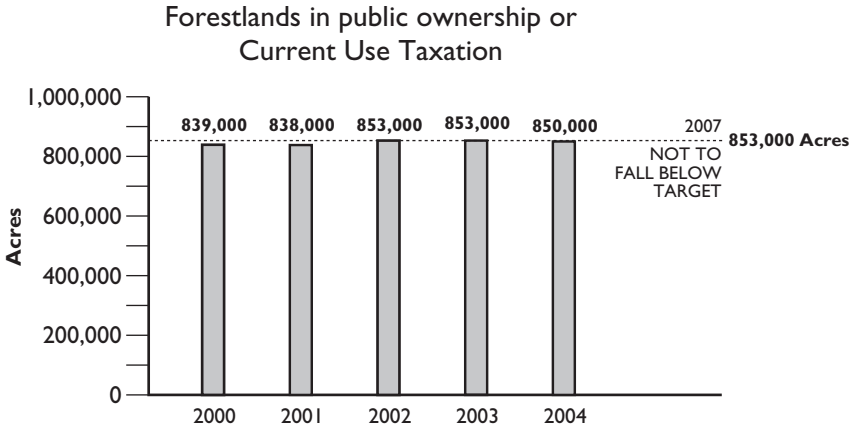
Acreage of Forestlands in Public Ownership or in the Current Use Taxation Program

ABOUT THIS INDICATOR

Forestlands, including those actively managed for timber, provide a variety of environmental benefits including maintaining the natural water cycle and providing wildlife habitat. As development pressure increases the value of forestlands, these lands are often converted to other, primarily residential, uses. Once the forest is fragmented into home sites, many of the environmental benefits, as well as the ability to manage the land for forest production, are lost.

Through the Timberland and Forestland property tax programs, actively managed forestlands are taxed at the current use, keeping property taxes relatively low. DNRP promotes these programs because they serve as incentives to encourage private landowners to voluntarily conserve and manage their forestland rather than convert it to another use. In addition, DNRP is actively involved in the acquisition of forestland and development rights by pursuing select properties and supporting the efforts of nonprofit groups.

This indicator is intended to track the amount of land that is conserved as forest through public acquisition (including development rights) and enrollment in Current Use Taxation (CUT). Note that when land is brought into public ownership, it is removed from the current use taxation program, so an increase in publicly owned land will result in a decrease in current use taxation enrollment.



OBSERVATIONS

The 2003 King County Annual Growth Report states that between 1972 and 1996 there was a 33 percent decrease in forest cover within the county. County efforts have slowed the conversion of forestland in the past decade, but there continues to be tremendous development pressure throughout the region. The amount of forestland in public ownership and in the CUT program has remained relatively constant since 2000.

OUR STRATEGY

The King County Assessor's Office administers the Forestland current use taxation program for large lots, greater than 20 acres. WLR administers the Public Benefit Rating System and Timberland current use taxation programs. The WLR Forestry Program provides technical assistance and education to small forest landowners to encourage them to maintain their land in forest and manage it responsibly. DNRP is also involved in the acquisition of forestlands and development rights.

The 2007 target is to maintain the existing amount of forestland in public ownership or enrolled in the current use taxation program. DNRP hopes to achieve this goal through acquisition, education, conservation easements, and incentive programs such as current use taxation. Meeting this target will likely require additional resources.

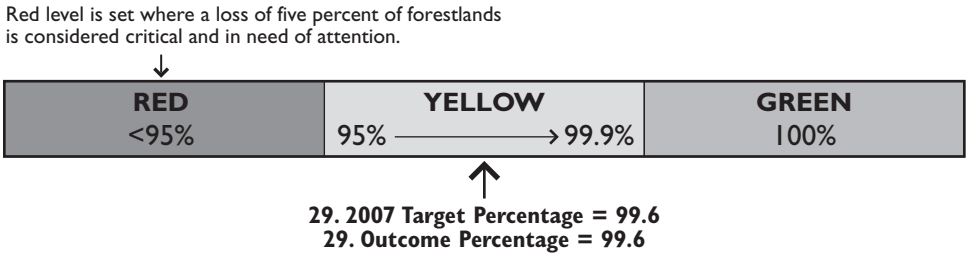
RATING

Results, Target and Outcome

2004 Results: 576,000 acres in public ownership + 274,000 acres in Current Use Taxation program = Total of 850,000 acres
2007 Target: 853,000 acres
Outcome: 853,000 acres

The target and long-term outcome are to maintain existing amounts of forestland acreage either in public ownership or in the Current Use Taxation Program.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

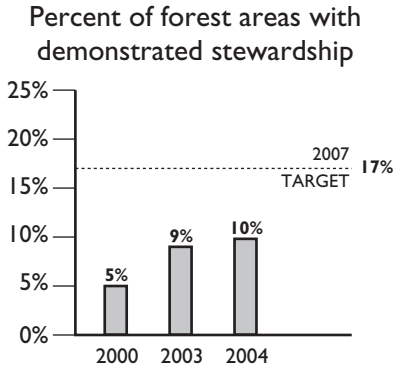
Assessor's Office, DNRP's Office of Rural and Resource Programs.

30 Percent of forest acres where landowners are demonstrating stewardship

ABOUT THIS PERFORMANCE MEASURE

Forestlands, including those actively managed for timber, provide a variety of environmental benefits, including maintaining the natural water cycle and providing wildlife habitat. A major focus of the Forestry Program is to provide technical assistance to small forest landowners to encourage them to manage their forests responsibly. Staff accomplishes this by assisting with forest stewardship plans, providing on-site technical assistance, and offering forest stewardship classes. It is assumed that a landowner who writes a plan, seeks technical assistance, or takes a class has a commitment to retaining the property in forestry for some time. This measure serves as a proxy for best management practice implementation and appropriate forest stewardship.

The acres considered for this measure are forested lands in the Rural Area and Forest Production District owned by non-industrial private forest landowners (NIPFs). Land showing proper stewardship is being defined as forested lands: 1) with an existing forest stewardship plan; 2) where technical assistance has been provided by the DNRP Forestry Program, or; 3) whose landowners have taken a forest stewardship class offered by the DNRP Forestry Program in cooperation with Washington State University Extension.



OBSERVATIONS

There are approximately 51,000 forested acres in the Rural Area and Forest Production District owned by non-industrial private forest landowners. From 1997 through 2002, the Forestry Program has affected a total of 4,592 acres in these areas through planning, technical assistance and stewardship classes, an average of 765 acres per year. In 2003 and 2004, the program affected 1,151 acres.

The measure changed from tracking acres within the Rural Forest Focus Areas to tracking acres in the rural area and the Forest Production District owned by NIPFs. The adoption of the Critical Areas Ordinance allows forest landowners to develop forest stewardship plans or rural stewardship plans. As a result, more of the work of the Forestry Program is focused on assisting landowners meet these regulatory needs.

OUR STRATEGY

Since the program is relatively new, many of the early participants were eager to be involved. It is anticipated that attaining the same level of participation will be challenging. The strategy is to sustain the current rate of 765 acres per year to achieve the 2007 target.

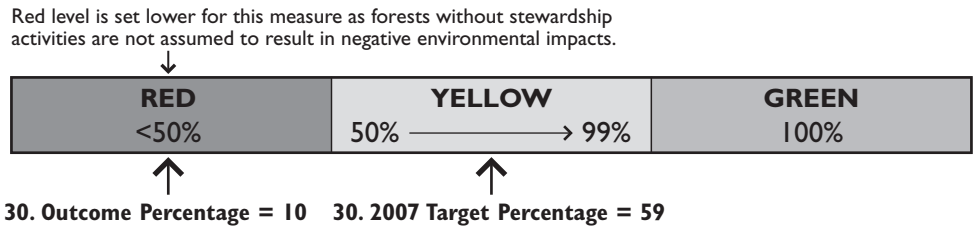
RATING

Results, Target and Outcome

2003 Results: 10 percent
2007 Target: 17 percent
Outcome: 100 percent

The 2007 target is based on the historical number of acres impacted per year. With current staffing levels able to impact approximately 765 acres per year, this would total 8,400 acres by the end of 2007. The long-term outcome is to eventually affect the 51,000 acres owned by NIPFs.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

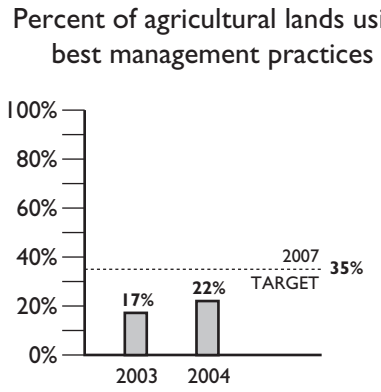
DNRP's Office of Rural and Resource Programs.

31 Acreage of agricultural lands using agricultural best management practices

ABOUT THIS PERFORMANCE MEASURE

Unmanaged stormwater run-off from farms can contribute excess nutrients to streams and other waterbodies, promoting the growth of aquatic weeds. These weeds choke stream channels, inhibiting fish passage, while also depleting dissolved oxygen that fish need to survive. This run-off can also contain pathogens or excess nutrients harmful to humans. Livestock can also directly impact streams by trampling riparian vegetation and stream channels.

King County has a Livestock Management Ordinance whose primary purpose is to support livestock operations in a manner that minimizes their adverse impacts on the environment - particularly water quality and salmonid fisheries habitat. The ordinance calls for implementation of BMPs that protect environmental features from livestock impacts. Examples of these BMPs are stream and wetlands buffer fencing, manure storage structures, and runoff management facilities such as gutters and downspouts. This measure is intended to track the degree to which farms are implementing these BMPs. Implementing at least one BMP is required to be included in the measure.



OBSERVATIONS

BMPs are encouraged for all livestock owners and horticultural farmers in order to minimize the environmental impacts of farm practices and maximize the environmental benefits of farmland in King County. In most instances these practices are not required, but are done voluntarily by property owners to be good stewards of the land. In order to encourage the use of BMPs, WLR offers cost-share grant funding to landowners.

Since the use of BMPs are voluntary, many landowners do so without county knowledge. The data for this measure show only the known acreage of farmland on which BMPs are actively used—14,175 acres out of a total of 65,000 farm acres. This includes the acres involved in the King County cost-share program, and an estimate of acres using BMPs as a result of farm plans implemented through the King Conservation District. It is important to note that the increase between 2003 and 2004 is due primarily to more accurate estimating of the baseline condition, rather than increased

efforts by the county. In 2005, agriculture program staff plan to statistically sample the remaining farms to obtain a comprehensive estimate on the use of agriculture BMPs.

OUR STRATEGY

Provide education and technical assistance to landowners on the value of farm planning, including the installation of BMPs, to their farm operations and for the environment. Provide cost share assistance to landowners who agree to implement water quality BMPs listed in their farm plans. Provide manure management and composting technical assistance to farmers.

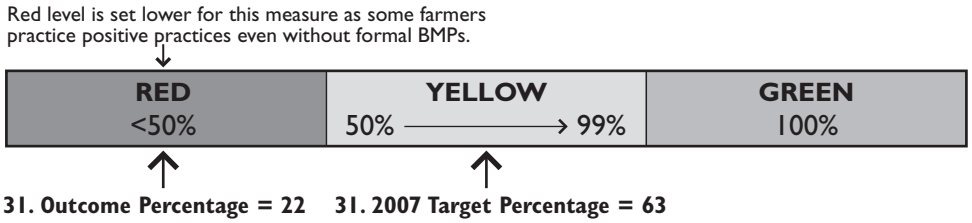
RATING

Results, Target and Outcome

2004 Results: 22 percent
2007 Target: 35 percent
Outcome: 100 percent

The long-term outcome is that all King County parcels with livestock or horticultural farming install the appropriate BMPs.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP's Office of Rural and Resource Programs, King Conservation District.

LEADERSHIP

OUTCOME: The department is recognized as a resource and a leader in environmental issues in the region

Local jurisdictions' rating of their relationship with DNRP

32

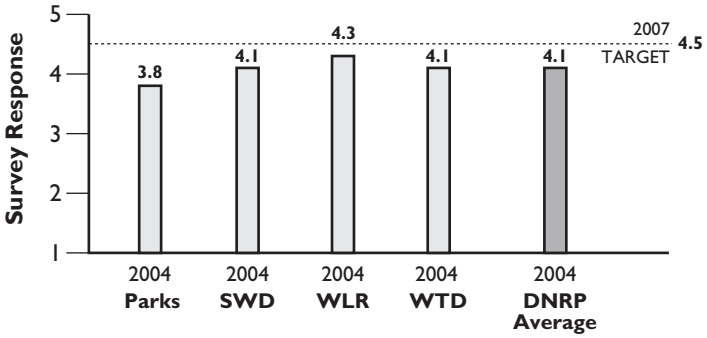
ABOUT THIS PERFORMANCE MEASURE

One element of leadership is to have positive relationships with others with whom you work. Environmental outcomes in particular require sustained, coordinated actions by a wide variety of organizations in order to be accomplished. In addition, DNRP has a goal of being a regional service provider. Therefore, DNRP views a positive relationship with local jurisdictions as a critical element in our overall success as an organization.

In 2004, DNRP developed a departmental internet survey tool that included sections for each division. Local jurisdictions were asked to give their opinion on the question "How would you rate your relationship with division name" using a five-point Likert scale: excellent (5), good (4), adequate (3), poor (2) and very poor (1).

The survey was sent to 284 individuals (staff, management, and elected officials) from local jurisdictions that were obtained from existing departmental databases. Respondents were also encouraged to send the survey to additional jurisdictional representatives. There were 51 respondents (18 percent response rate) representing 28 jurisdictions (58 percent response rate). Multiple responses from a single jurisdiction were averaged and the total score was based on an equal weighting by jurisdiction (rather than by number of individuals responding). The Wastewater Treatment Division used the same approach but sent their survey out separately; however, their results were treated the same way. Wastewater Division sent online surveys to 31 agencies and received nine responses. This was a 29 percent response rate and respondents represented 28 percent of the division's customer base. The DNRP score, which serves as the basis for the measure, is an unweighted average of the four divisions' ratings.

Local jurisdictions rating of their relationship with DNRP



OBSERVATIONS

Due to the changed methodology, these results are not strictly comparable to previous figures. Previous results indicated a very positive relationship between DNRP and local jurisdictions, with 86 percent reporting a "good" or "excellent" response. The new rating is likewise very positive.

OUR STRATEGY

DNRP can improve its communication to foster a more positive relationship with local jurisdictions. Many of the issues that DNRP faces, such as moving towards being a regional service provider or ongoing budget pressures, have direct impacts on local jurisdictions. Cities, sewer districts, and other governmental bodies all work collaboratively with DNRP on a wide variety of issues. However, as DNRP's business environment changes due to broader issues affecting King County, the department needs to make sure that these local jurisdictions are appropriately involved in decision-making, and have a say in the desired outcomes and programmatic impacts.

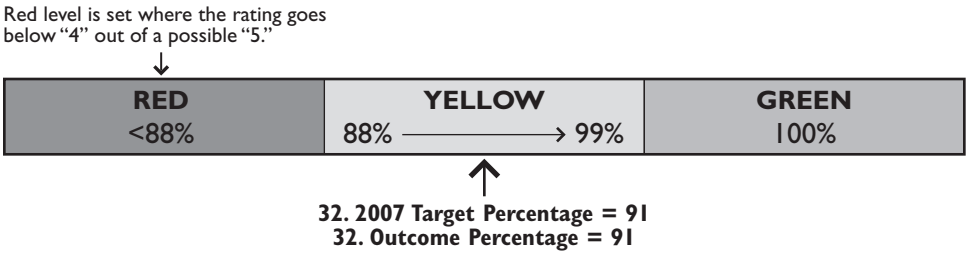
RATING

Results, Target and Outcome

2004 Results: 4.1 out of 5
2007 Target: 4.5
Outcome: 4.5

The target and long-term outcome is to have all jurisdictions view their relationship with DNRP as positive.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP and WTD surveys of local jurisdictions.

OUTCOME: The department is recognized as a resource and a leader in environmental issues in the region

Local jurisdictions' rating of DNRP as a resource in addressing environmental issues in the region

33

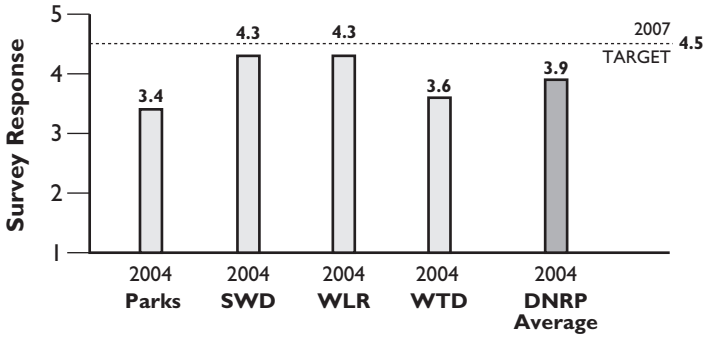
ABOUT THIS PERFORMANCE MEASURE

DNRP serves numerous roles with local jurisdictions. One important role is that of a regional resource for jurisdictions that do not have the technical or financial resources to independently address environmental or resource management issues. DNRP's role as a resource to local jurisdictions comes in several forms as: an information source, technical assistance provider, or a direct service provider.

In 2004, DNRP developed a departmental internet survey tool that included sections for each division. Local jurisdictions were asked to give their opinion on the question "How would you rate division name as a resource (such as providing information or technical assistance) in regional environmental issues?" using a five-point Likert scale: excellent (5), good (4), adequate (3), poor (2) and very poor (1).

The survey was sent to 284 individuals (staff, management, and elected officials) from local jurisdictions that were obtained from existing departmental databases. Respondents were also encouraged to send the survey to additional jurisdictional representatives. There were 51 respondents (18 percent response rate) representing 28 jurisdictions (58 percent response rate). Multiple responses from a single jurisdiction were averaged and the total score was based on an equal weighting by jurisdiction (rather than by number of individuals responding). The Wastewater Treatment Division used the same approach but sent their survey out separately; however, their results were treated the same way. Wastewater Division sent online surveys to 31 agencies and received nine responses. This was a 29 percent response rate and respondents represented 28 percent of the division's customer base. The DNRP score, which serves as the basis for the measure, is an unweighted average of the four divisions' ratings.

Local jurisdictions rating of their view of DNRP as a resource



OBSERVATIONS

Due to the changed methodology, these results are not strictly comparable to previous figures. The results for this measure show the Solid Waste and Water and Land Resources divisions as being rated very high in their role as a resource for local jurisdictions. This may reflect the nature of their work, which is in part to provide expertise and technical assistance. Parks and Wastewater Treatment divisions' lower ratings show areas for future improvement.

OUR STRATEGY

As part of the divisions' business planning processes, DNRP has been taking a much closer look at:

- what role each division should have in terms of service provision,
- are the services each division is providing important to the cities, and
- how is each division performing those services.

DNRP plans to continue to use business planning, jurisdictional surveys, and interlocal forums to gather information about local jurisdictions' ideas for DNRP's role in serving as a technical or administrative resource and regional service provider.

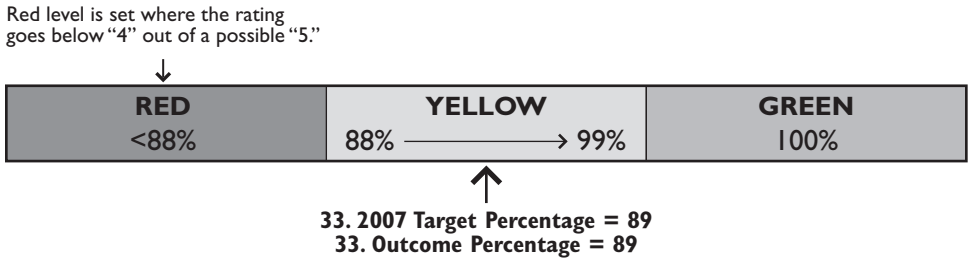
RATING

Results, Target and Outcome

2004 Results: 4.0 out of 5
2007 Target: 4.5
Outcome: 4.5

The target and long-term outcome is to have all jurisdictions view DNRP as a resource in addressing environmental issues in the region.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP and WTD surveys of local jurisdictions.

OUTCOME: The department is recognized as a resource and a leader in environmental issues in the region

Percent of local jurisdictions that view DNRP as providing leadership in addressing environmental issues in the region

34

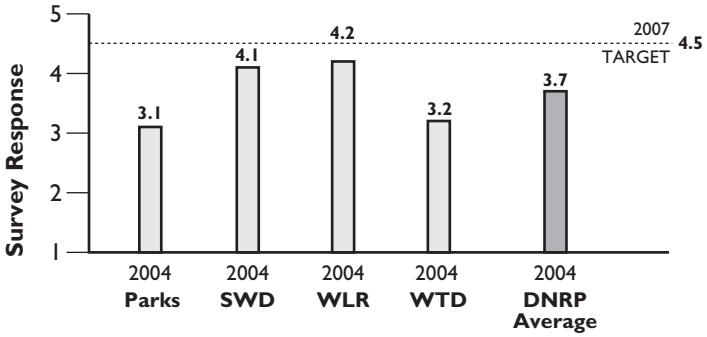
ABOUT THIS PERFORMANCE MEASURE

Many of the important environmental issues facing the region are technically complex, have significant costs, and include elements of uncertainty and risk. In its effort to be a high performance organization, DNRP seeks to provide leadership on these challenging environmental and resource management issues. Leadership can be shown through serving as a lead entity in a planning effort, providing unique technical resources, or developing an innovative program or policy solution. This measure tracks the perception local jurisdictions have of DNRP as a leader on regional environmental issues.

In 2004, DNRP developed a departmental internet survey tool that included sections for each division. Local jurisdictions were asked to give their opinion on the question "How would you rate division name as a leader in regional environmental issues?:" using a five-point Likert scale: excellent (5), good (4), adequate (3), poor (2) and very poor (1).

The survey was sent to 284 individuals (staff, management, and elected officials) from local jurisdictions that were obtained from existing departmental databases. Respondents were also encouraged to send the survey to additional jurisdictional representatives. There were 51 respondents (18 percent response rate) representing 28 jurisdictions (58 percent response rate). Multiple responses from a single jurisdiction were averaged and the total score was based on an equal weighting by jurisdiction (rather than by number of individuals responding). The Wastewater Treatment Division used the same approach but sent their survey out separately; however, their results were treated the same way. Wastewater Division sent online surveys to 31 agencies and received nine responses. This was a 29 percent response rate and respondents represented 28 percent of the division's customer base. The DNRP score, which serves as the basis for the measure, is an unweighted average of the four divisions' ratings.

Local jurisdictions rating of their
view of DNRP as an environmental leader



OBSERVATIONS

Due to the changed methodology, these results are not strictly comparable to previous figures. This score is the lowest of all of the local jurisdictional survey-related measures. Some of the recent budget issues and projects have not been positively received by local jurisdictions. For example, the Parks and Recreation Division has been facing a protracted reduction in funding, including transferring facilities to local jurisdictions. Likewise, the Wastewater Treatment Division has been moving forward with Brightwater, the regions' third wastewater treatment facility. Water and Land Resources Division has been working on salmon planning, which seems to be more positively received. Solid Waste Division's implementation of their business plan seems not to have eroded local jurisdictional support.

OUR STRATEGY

Leadership often requires making difficult decisions around controversial topics. Siting the Brightwater wastewater treatment plant, transferring county parks, or changing solid waste transfer station operating hours all required informing local jurisdictions and the affected communities to develop an acceptable approach that addresses key policy, operational, or programmatic needs.

There are a number of important regional issues, such as land management, salmon restoration, and water resource management (including water quality restoration, groundwater protection, and instream flow management) where DNRP hopes to have a leadership role. DNRP plans to better understand what local jurisdictions expect from the county, develop specific strategies to respond to those needs, and where possible, address those needs and implement the strategies. When the county cannot meet expectations, DNRP will work with the affected jurisdictions on alternate strategies.

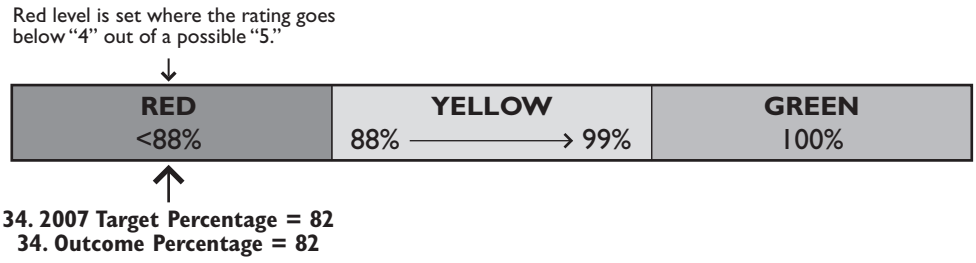
RATING

Results, Target and Outcome

2004 Results: 3.7 out of 5
2007 Target: 4.5
Outcome: 4.5

The target and long-term outcome is to have all jurisdictions view DNRP as providing leadership in addressing environmental issues in the region.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP and WTD surveys of local jurisdictions.

PRICE OF SERVICE

OUTCOME: Department utility rates are reasonable and competitive

Comparison of fees and rates with other agencies that provide comparable services

35

ABOUT THIS PERFORMANCE MEASURE

This measure is of interest because DNRP desires to minimize fees and rates while maximizing the value of services provided to King County residents. There is an expectation that public agencies provide a desired or mandated service in a competitive manner. One way to ensure that our prices for services remain reasonable is to compare them with other jurisdictions - often called "benchmarking."

Fee and rate comparisons across jurisdictions need to be viewed with great care for several reasons: the range of service is often not comparable; the level of service provided may differ; fees and rates are often structured differently; and fee and rate revenues may cover different proportions of program costs. Because these factors are not readily quantifiable, no target is being defined for this measure, although it will be tracked over time to identify trends.

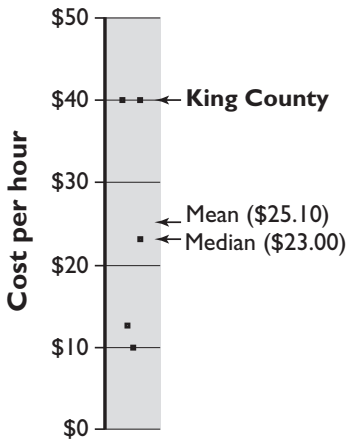
The charts below provide a range of fees or rates for a defined set of jurisdictions that were believed to provide roughly similar services to King County DNRP. The graphs also indicate where King County falls within this range. The following description includes the set of jurisdictions used for comparison and key factors affecting rates for each service.

Parks

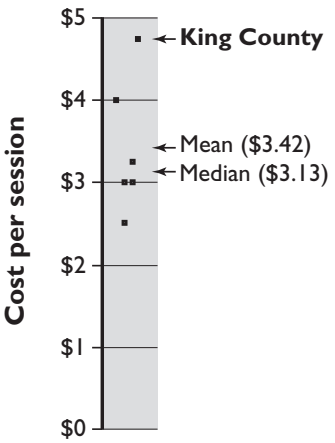
Comparison group: Six jurisdictions for ball fields, and five for aquatics that are large metropolitan parks and recreation providers in the Northwest. Fees for adult ball games and adult swim/lap swim were determined to be representative and commonly available, and therefore easiest to compare with other jurisdictions.

Factors affecting rates: Level of service, quality of facility, level of subsidy or general fund support, field type (grass vs. sand), game type (soccer vs. baseball), resident status, practice vs. game.

Field rental fees (2004)



Lap swim fees (2004)

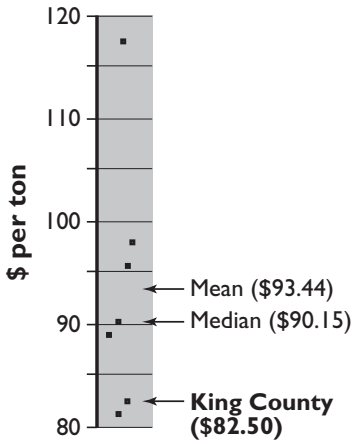


SWD

Comparison group: Seven large jurisdictions in Washington having solid waste programs (includes those counties serving > 300,000 people and cities serving > 150,000 people). This group was chosen because tip fees are primary source of revenues, and the level and range of services appear to be generally comparable.

Factors affecting rates: Range of services provided (and funded through fees); level of services; disposal method; differences in rate structure; other sources of revenues; and regulatory requirements.

Solid waste tip fees (Feb. 2005)

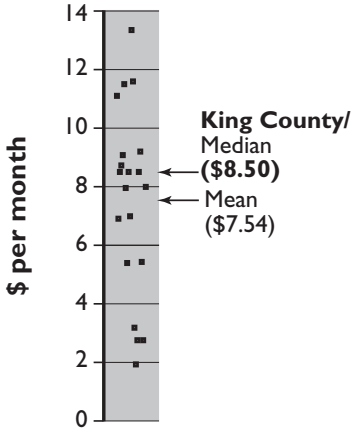


WLR

Comparison group: Thirteen jurisdictions in King County (population > 20,000) with a storm or surface water fee, plus the five other jurisdictions in Western Washington large enough to require a NPDES Phase I stormwater permit. National comparisons are less justifiable due to differences in permit requirements, environmental and climatic conditions, and government structure.

Factors affecting rates: Extent of services provided (such as, street sweeping, facility construction and maintenance, regulatory development, etc.); levels of services provided (such as, some jurisdictions provide more extensive education and outreach, regulatory development, facility maintenance); type/extent of stormwater problems (such as, some jurisdictions have more significant water quality/drainage issues than others); extent of facility construction (such as, the proportion of jurisdictions' operating budgets to capital budgets varies significantly across jurisdictions); and financial differences (such as, rate structure, proportion of revenues from residential charges vs. other sources, amount of debt financing).

Single family stormwater rate (2004)

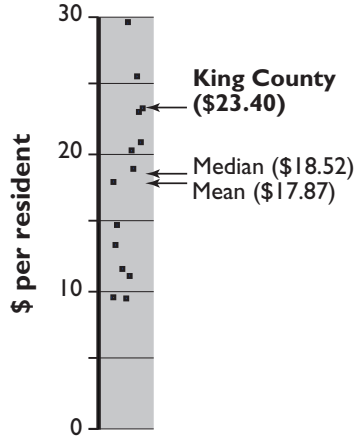


WTD

Comparison group: Fourteen wastewater utilities providing interceptor and treatment services (no collection), responding to 2002 Association of Metropolitan Sewerage Agencies financial survey.

Factors affecting rates: History of capital construction/degree of federal grant funding; range of services provided; permit limits/environmental considerations; treatment technology used; labor rates (varies by geographic location); major capital projects in progress; non-rate revenue available; organizational structure (whether the utility is a stand alone utility district versus part of general purpose government); and financing strategy and rate setting policies (desire for rate stability).

Average monthly residential wastewater service rate (2004)



OBSERVATIONS

Ball Field and Swim Fees

Parks ball field and lap swim fees remain as high as or higher than comparable organizations. Fees structures vary between jurisdictions and can change over time. For instance, Parks fee structure changed between 2003 and 2004 from charging "per game" to "per hour" and Parks began differentiating between soccer versus baseball/softball fees. In 2003, the field rate was converted to an hourly rate using a game time of $1^1/_2$ hours when $1^3/_4$ hours should have been used to determine an hourly fee. Charging and tracking fees has become much easier since changing to an hourly fee. Some jurisdictions charge more for non-residents, while some jurisdictions, including King County, charge different rates for soccer and baseball/softball fields. To minimize variances, soccer rates where compared when game-type fees varied (Parks' baseball rate is $55 compared to a $40 soccer rate). Finally, fees for field rentals are for the entire team, not per person. Consequently, King County ball game fees are less than $2 per person per game. See Measure No. 36 for a more detailed discussion of revenues from these fees.

Although this measure does not compare fees to private entities, one ball field programmer and provider charges $150 minimum for the first $1^1/_2$ hour and $100 for each additional hour. Clearly, the market will bear much higher fees for competitive, high-end facilities.

Solid Waste Tip Fees

King County's solid waste tip fee (the basic fee charged per ton of waste delivered to county transfer stations) is below the mean (average) and median for the comparison group. This is particularly noteworthy because the county provides a broad range of high-level solid waste services, including extensive recycling programs. The lower cost of using an in-county landfill compared to other disposal methods (such as waste export) is a primary reason for the relatively low rates.

Surface/Stormwater Fees

King County's single-family surface water fee is within the range for the comparison group, but slightly above the mean (average). King County will continue to strive to minimize costs and rates, and the county's rates are believed to be justifiable given the range and extent of services provided. Services provided by King County appear to be more extensive than those provided by some other jurisdictions. For example, King County appears to provide a high level of educational and outreach services relative to other jurisdictions. In addition, King County provides services that some jurisdictions do not. For example, King County provides development drainage standards, groundwater protection, extensive stewardship services to assist landowners, high level drainage complaint response, and programs to control water quality and erosion. King County also manages and adheres to an NPDES Phase I stormwater permit.

Wastewater Service Charges

King County's residential wastewater service charge is within the range, but above the mean and median of the comparison group. There are significant differences among these utilities in the extent and level of services they provide. Some may not provide full secondary treatment or recycle biosolids as extensively as King County, for example. Additionally, the division is in a period of major construction activity that is an investment in future service. This includes two large CSO projects and the Brightwater treatment plant and conveyance system.

That the division's rates are in the same general range as other utilities reinforces the division's deliberate efforts in recent years to become more efficient while continuing to provide a high level of service.

OUR STRATEGY

Parks
Under the 2003 Parks Business Plan, Parks is relying more heavily on user fees. It is important that fees do not increase to the point that users cannot afford to participate in recreation programs, or that the parks system is not competitive with other providers that results in a reduced user base or loss of revenue. The division will continue to monitor other public agency user fees, maintain the existing dialogue with user groups, and increase our other revenue streams in order to become more self-reliant.

The division will continue to discuss our role as a provider of ball fields and how our fee structure will be modeled (market driven or cost-recovery driven). We will continue to upgrade our facilities so that they are safe and desirable to play on.

SWD
The 2004 SWD Business Plan has an explicit business strategy that states, "rate increase for consumers for the next 20 years are not higher or earlier than projected in the 2001 Solid Waste Plan." The business plan outlines a wide variety of measures to increase efficiencies within the division to keep rates low and ensure this strategy is met.

WLR
Maximizing ratepayer value is a key component of WLR's 2004 Business Plan. No increases in surface water management fees are planned through 2006.

WTD
The division launched a "Productivity Initiative" in 2001 that has already resulted in reduced operating costs and increased savings to ratepayers. The division will continue to put significant effort into controlling costs and keeping rates as low as possible.

RATING
Information on rates was compiled to allow a qualitative comparison and there are no explicit targets or outcomes for this measure.

Parks ball field and pool fees > average fees from other jurisdictions
Solid waste tip fee < average fees from other jurisdictions
Surface/stormwater rate > average fees from other jurisdictions
Wastewater service rate > average fees from other jurisdictions

DATA REFERENCE
Parks and SWD: Contacts with program representatives from various jurisdictions; Internet research. WLR: Contacts with program representatives from various jurisdictions; rate compilations prepared by King County and other jurisdictions. WTD: 2002 AMSA Financial Survey; contacts with wastewater utilities.

OUTCOME: Department utility rates are reasonable and competitive

Growth in DNRP rates and fees relative to the consumer price index

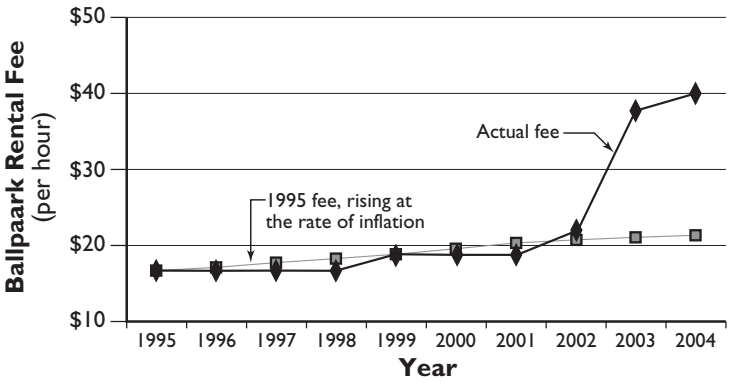
36

ABOUT THIS PERFORMANCE MEASURE

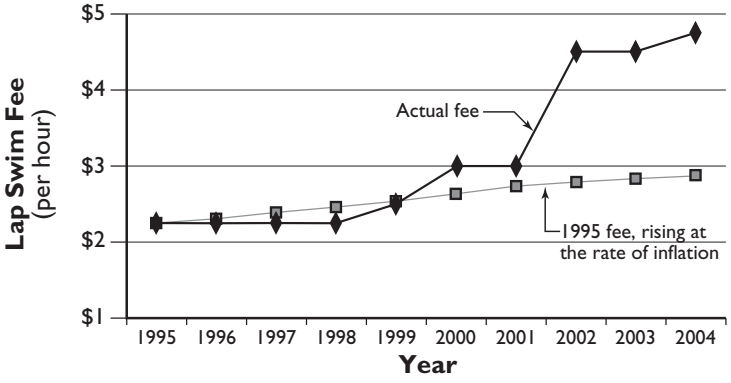
One indicator of how reasonable DNRP's prices of services are is to compare how rates and fees have changed relative to the rate of inflation. The Consumer Price Index is the most widely accepted measure of inflation. This measure is being used as one type of benchmark to assess our price of service and ensure that the department is providing cost-effective services to our customers.

It is important to compare rates and fees to inflation over a several year period, since rate adjustments are often step-wise in nature. The time period must be set so that services and legal or programmatic requirements are generally comparable across the period. For all fees a ten-year period was chosen (1995-2004).

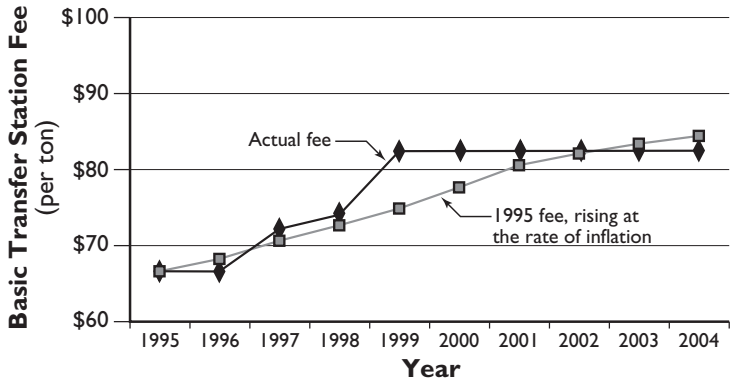
Parks and Recreation Division:
Ballpark fee compared to rate of inflation



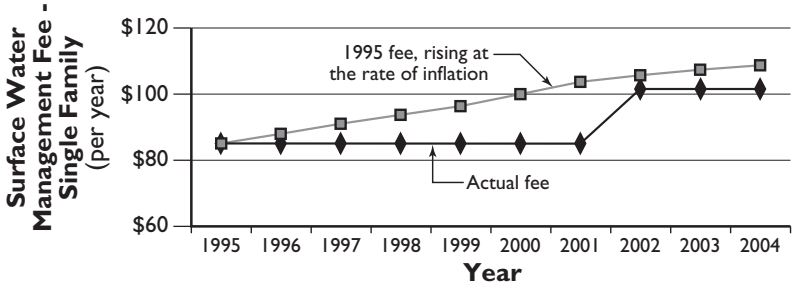
Parks and Recreation Division:
Lap swim fee compared to rate of inflation



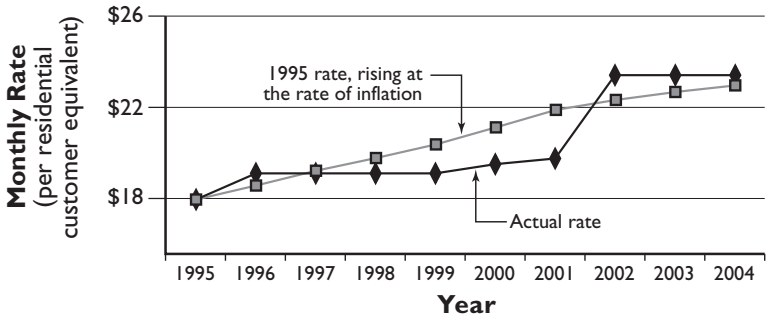
SWD:
Tip fee compared to rate of inflation



WLR:
Surface water management fee compared to rate of inflation



WTD:
Service charge compared to rate of inflation



OBSERVATIONS

Parks

Parks user fees were set very low in 1993, with some services free, reflecting the long-standing practice of subsidizing parks and recreation facilities with general fund, also known as current expense fund, tax revenues. Fees were established in ordinance each year through 2002. There was a fee increase in 2002 in response to the county current expense budget crisis and a significant increase in 2003 in direct response to the County Council mandate to increase fees in order to improve cost recovery for the agency. Youth fees continue to be set at a low rate. After 2003, DNRP was given fee setting authority.

Rates for fee-based park facilities need to be comparable with other jurisdictions, respond to inflation, not be fully subsidized by non-users, and address cost recovery, yet be priced low enough so that the public is provided an important and desired service. In contrast with utility rates in the other divisions, Parks' rates are not expected to stay below CPI because it must make up for historical subsidies by general fund revenues. Under county ordinance, Parks must increase its fees in order to recover a higher percentage of its operating expenses. In contrast, utility fees are generally set to fully recover operating costs.

Despite the increase in fees, the Parks division met or exceeded projected fee revenues in 2004 while simultaneously maintaining a high user base:

- Aquatics user fees were $1,703,067 overall in 2004, an increase of 0.62 percent over 2003. However, revenues were down from 2003 for several pools including Vashon, Cottage Lake, Renton, and Tahoma, despite a modest increase in pool fees. The decrease in pool fees from the Renton pool could be in part due to the opening of a new pool in the City of Renton, dampening some user demand for aquatics. Revenues were up for the King County Aquatics Center by eight percent; this is of note because this is a large regional facility, consistent with the division's business plan to focus efforts on regional facilities. The relatively small growth in total aquatic fee revenues since 2003 may be the result of a variety of factors. There also may potentially be some price sensitivity in certain areas of the county. Still, the division believes more revenues can be generated from pools.
- Field revenues increased slightly in 2004 to $492,433 (from $452,565 in 2003) even though adult rentals were down. This is due to the fact that there was a modest increase in youth fees and youth rentals remained strong.

SWD and WLR

Solid waste rates and surface water management fees are lower than if they had simply risen at the rate of inflation over the past ten years. Many factors drive the level of utility rates, including changes in the economy, demand for services, floods and other natural disasters, and changes to the rate base.

WTD

The 2004 wastewater rate is slightly higher than if the 1995 rate rose at the level of inflation. Wastewater rate increases over the past few years were due to growth in the capital and operating expenditures to accommodate enhancements at West Point treatment plant, increased energy costs incurred in 2001, and to allow for a stable three-year rate. Such Council approved actions were needed to meet current regulatory requirements and maintain the financial viability of the utility, and will help to minimize long-term rate increases.

OUR STRATEGY

Parks

All ball field fees will be set at an hourly rate instead of per game rate. This will increase accuracy and efficiency in scheduling, billing, and reporting. Under the 2003 Parks omnibus ordinance, Parks has been authorized to recommend fees for the department director's approval, which provides Parks staff the ability to more quickly

establish market driven fees. Because fees are not the only revenue source expected to grow, Parks will enhance marketing, partnerships, and public outreach efforts in order to increase revenue streams and the user base.

SWD
The 2004 SWD Business Plan has an explicit business strategy that states, "rate increase for consumers for the next 20 years are not higher or earlier than projected in the 2001 Solid Waste Plan." The business plan outlines a wide variety of measures to increase efficiencies within the division to keep rate pressure low and ensure this strategy is met.

WLR
Maximizing ratepayer value is a key component of WLR's 2004 Business Plan. Although the Business Plan is still being developed, an increase in surface water management fees is not anticipated.

WTD
WTD has been implementing a Productivity Initiative to reduce operating costs and reduce future rate pressure. The division's capital improvement program will require a rate increase in 2005. There will be continuing upward pressure on the rate over the next several years as the Regional Wastewater Services Plan is implemented and investments are made in maintaining and upgrading the utility's system of treatment plants, wastewater conveyance facilities, pump stations, and combined sewer overflows improvements.

RATING
Information on rates was compiled to allow a qualitative comparison and there are no explicit targets or outcomes for this measure.

Parks fees > Consumer Price Index
Solid waste tip fee < Consumer Price Index
Surface/stormwater rate < Consumer Price Index
Wastewater service rate > Consumer Price Index

DATA REFERENCE
DNRP records; Bureau of Labor Statistics (Consumer Price Index data for all urban consumers, Seattle-Tacoma-Bremerton, WA, 1992-2004).

OUTCOME: Department utility rates are reasonable and competitive

Percent of Cost Savings Realized

37

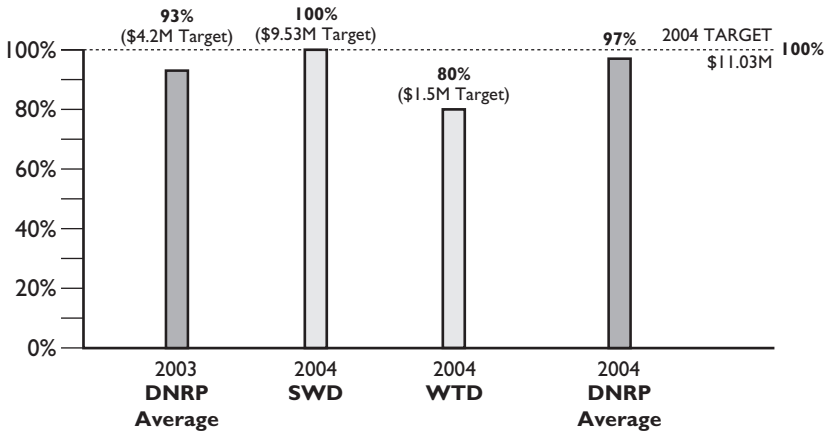
ABOUT THIS PERFORMANCE MEASURE

As budget and privatization pressures increase in counties throughout the country, DNRP has been at the forefront in achieving cost savings. Wanting to ensure a continued role for government in key activities, DNRP divisions have carefully examined operations to identify savings. King County's own recent budget shortfalls have also prompted DNRP's divisions to re-evaluate existing programmatic and operational assumptions, such as what programs were financially sustainable.

Because there is no common type of service offered by all of DNRP's divisions, this measure Is defined as the specific saving targets that are defined in strategic planning documents created by DNRP divisions within the past few years. For example, as part of WTD's Productivity Initiative process, the division projected annual savings from 2000 through 2010. The 2002 Parks Business Plan identified specific cost saving strategies. SWD identified planned savings from operational efficiencies in its 2004 Business Plan. We are using the business planning process to reduce costs, which in turn reduces the pressure on the price of service. Cost reductions are the first step in creating the expectation that specific efficiencies must be identified and implemented.

This measure tracks the overall ratio of savings achieved from operational and capital sources compared with anticipated savings. The basis for determining anticipated savings is a "status quo" budget projection compared to last year's budget. Savings are presented as annual incremental amounts so that annual targets can be developed. In addition, some savings are considered one-time only savings.

DNRP cost savings



OBSERVATIONS

Parks
Parks did not have a 2004 cost saving target.

SWD

The Solid Waste Division 2004 Business Plan, published in September 2003, described $9.43 million in planned savings and new revenue for 2004 to fund a $7 million rent payment for the land under the Cedar Hills landfill. The savings also support the solid waste capital program while keeping rates as low as possible.

When the 2004 budget was adopted, planned savings and revenue from Business Plan initiatives totaled $9.53 million, including $2.1 million in administrative and management savings, $2.9 million in savings from operating efficiencies, $2.8 million in changes that affected service levels, and a $1.7 million net gain from an increase in the regional direct fee.

In 2004, SWD realized $7.93 million in savings and new revenue from the Business Plan initiatives, or 83 percent of the target. The two areas of lower than expected savings were in operating efficiencies and the net revenue from the regional direct fee increase. The revenue received was less than expected due to the effect of litigation and delays in the implementation of the new rate.

While the entire target amount was not met through the initiatives identified in the 2004 Business Plan, the division achieved the remainder of the savings through further cuts in consultants and contracted services, as well as in printing, computer hardware, and supplies.

WLR

WLR did not have a 2004 cost saving target.

WTD

WTD's Productivity Initiative for the annual operating budget has two parts: 1) annual targeted budget reductions totaling 12 percent to be achieved between 2000 and 2005, and 2) additional savings, which if documented as resulting from new ways of doing business, are divided equally between the ratepayers and employees (through contributions to an "incentive fund"). In 2001, 2002, and 2003, WTD achieved the targeted reductions as well as additional savings. Additional documented savings were $1.38 million in 2001, $0.84 million in 2002, and $0.47 million in 2003. As of 2003, the division produced a cumulative savings to ratepayers of $16.147 million.

Savings to be achieved through the Wastewater Program Business Plan Savings in 2004 were projected at $1.5 million. Most--though not all--of the planned actions were successful: the vacancy rate was maintained at three percent, reductions were made in administrative staff, specific operating activities achieved savings at or above projected levels, and revenues from chemical toilet waste and the capacity charge met or exceeded projections. However, anticipated savings related to high solids centrifuges, energy management, reclaimed water, and overtime did not meet projections, nor did increased revenues projected from the West Point Cogen project. Combined performance of business plan savings items yielded $1.2 million in savings, about 20 percent less than what had been projected. As with the overall gap between the 2004 Productivity Initiative target and actual expenditures, this shortfall was offset by other savings attributed to vacancies, special projects, and employee suggestions for savings.

OUR STRATEGY

Through periodic strategic business planning, DNRP will continue to keep a strong focus on containing the costs to provide services.

Parks

Parks will continue to explore utilizing community partnerships as a way to complement our existing services. No specific targets are being set for further savings, although Parks is tracking cost recovery at each if its facilities to ensure revenues are sufficient for existing operating costs.

SWD

SWD's 2004 Business Plan detailed a variety of ways that the division would obtain operating efficiencies and new revenues. Major areas include: staff reductions, reducing use of consultants, revising hours of operation to better match customer demand, refocusing waste reduction and recycling programs, and setting the regional direct fee at the appropriate level.

Based on 2004 experience, SWD's 2005 target from the existing Business Plan initiatives is set at $8.8 million. The division will be developing another business plan for 2006 with a new target based on new or expanded savings measures.

WLR

WLR developed a strategic business plan in 2004 that identified organizational changes for the 2005 budget. The changes were due to declining revenues brought about primarily by annexation of unincorporated areas and the need to support new programmatic priorities. WLR reallocated some positions to new program areas (such as staffing for the Critical Areas Ordinance implementation) but also had some service reductions and layoffs due to these changes. Future service and staff reductions are anticipated based on declining revenues from a number of sources. No specific targets are being set to achieve savings beyond the reductions necessary to met future revenue limits.

WTD

WTD's key strategy for achieving savings is the Productivity Initiative. Savings are achieved through motivating employees with a productivity incentive fund, a Balanced Scorecard performance management system to focus efforts on strategic areas, and an annual business plan to identify savings. A regular employee newsletter, the Productivity Pipeline, keeps employees informed of productivity efforts.

WTD's plan for 2005 continues those Business Plan Strategies implemented previously. As an additional action to meet the Productivity Initiative target for 2005, WTD has committed to a supplemental group of cost control measures. These are being implemented mid-year, as are new methods for interim reporting on WTD's progress toward meeting the Productivity Initiative target.

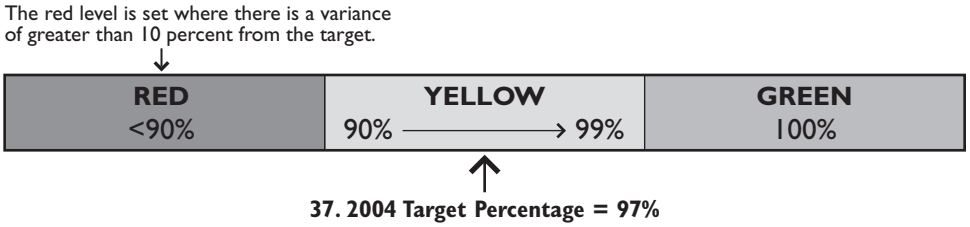
RATING
Results and Target

2004 Results:
Parks: none
SWD: $9.53 million (100% of $9.53M target)
WLR: none
WTD: $1.2 million (80% of $1.5M target)
Total for 2004: $10.73 million, 97% percent of $11.03M target

Cost savings targets are for the next fiscal year only.

2005 target:
Parks: none
SWD: $8.8 million
WLR: none
WTD: $1.49 million
Total for 2005: $10.19 million, 100 percent target

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE
Solid Waste Division 2004 Business Plan; Parks and Recreation Division Business Transition Plan: Phase II Report; Wastewater Treatment Division Productivity Initiative Annual Report, Water and Land Resources Division Business Plan (2005-2010), division budget data.

OUTCOME: Department utility rates are reasonable and competitive

Percent of anticipated revenue earned from entrepreneurial activities

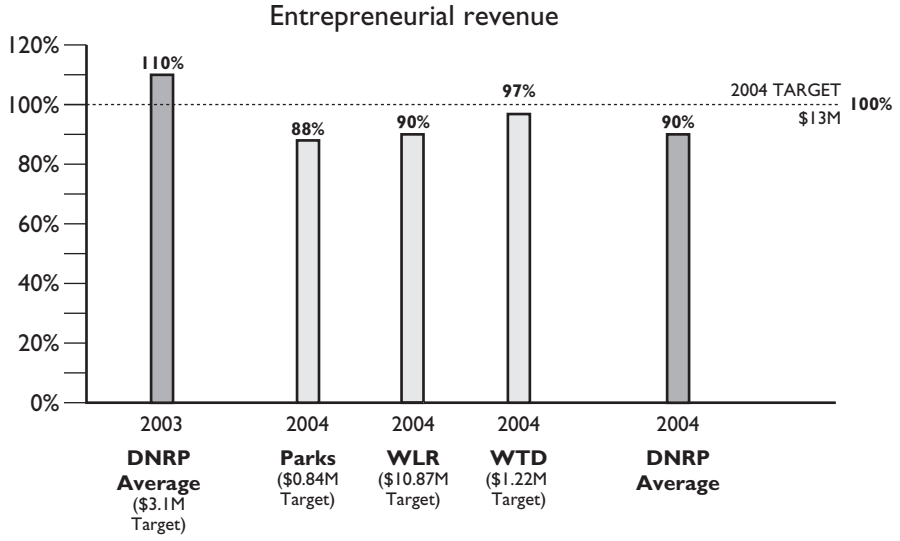
38

ABOUT THIS PERFORMANCE MEASURE

General fund revenues and specific fees have long been the mainstay of many county operations. However, the ongoing King County budget crisis has made DNRP divisions look carefully at finding and increasing non-fee revenues. A major focus of the strategic business planning that has been occurring in DNRP's divisions over the last several years has been to identify specific opportunities for new sources of revenue. This has meant new ways of doing business, including increasing the marketing of our services and capital assets. New revenues, coupled with increasing efficiencies (see Measure No. 37), are expected to allow DNRP to maintain existing service levels into the future while keeping its utility rates stable.

Revenue considered for this performance measure must meet one or more of the following criteria (and not contradict any of the others): leverages other funds; furthers our mission; is entrepreneurial in nature (including by providing services for external customers); or maximizes revenue from existing capital assets.

Each division has its own strategies for generating entrepreneurial, non-fee revenues. Parks' Business Plan focuses on obtaining new revenue from entrepreneurial approaches including: concession agreements, operating partnership agreements, advertising, corporate sponsorships, naming rights, grants and foundation donations. SWD's Business Plan encourages maximizing revenue from capital assets, such as rent from cell towers and advertising on SWD's truck trailers, selling landfill gas, obtaining rent from currently unutilized land and grants. WTD produces revenue methane production at South Plant, its cogeneration facilities at West Point and from cell towers. WLR has a diverse mix of non-fee revenue streams including: King Conservation District grants, stormwater services for cities, interlocal watershed services, maps & publications, and surface water monitoring impact fees. Examples of revenue not included in this measure because they do not meet the above criteria include: pass through funds, Conservation Futures levy funds, and Federal Emergency Management Agency cleanup finds.



Parks
The division initially projected $1,275,000 in entrepreneurial revenue for 2004 from the Marymoor parking fee, Marymoor Concert Series, and other revenues. With the 2005 budget submittal, the projections were revised to $847,350. The total entrepreneurial revenue earned was $746,443.

- The primary components of the 2004 entrepreneurial activities were Marymoor parking fee: In 2004, the parking fee was unchanged at $1.00 per day. This generated $401,141 in revenue, an increase of 36 percent from 2003. The results clearly indicate that the parking fee has become a robust and reliable source of revenue.
- Concert Series: In 2004, the strategy was to hold fewer shows with greater attendance at each show. This did not produce revenues as anticipated. Revenues generated in 2004 were $139,287, a reduction of 46 percent from 2003.

Revenues from concerts are somewhat unpredictable and to a large degree outside of the division's control. The division is dependent upon the entertainment market and the success of the promoter at securing popular and appropriately valued artists. In addition, concert revenues were down nationally by 35 to 45 percent.

In 2004, the county signed an agreement with Group Health Cooperative for naming rights for the Velodrome at Marymoor Park. The 2004 payment was pro-rated and the county received $96,352. In years two and three of the agreement (2005 and 2006), the County will receive $120,000 annually. Staff recently completed negotiations with SUBWAY restaurants for locations at the Aquatics Center (opened December 2004) and Marymoor Park (opened April 2005). It is anticipated that this will produce $24,000 annual revenue at the Aquatics center and in excess of $20,000 at Marymoor. The division continues to aggressively pursue mutually beneficial and financially lucrative agreements through the Partnership for Parks program and Specialty Advertising programs.

SWD
SWD did not have an entrepreneurial revenue target got 2004.

WTD
WTD entrepreneurial activities primarily focus on using waste material as resources wherever possible. South Plant recovers and sells methane gas while the West Point Plant uses methane gas to produce electricity. The "target" in this case is the percent of projected revenue actually earned. 2004 is the last year WTD will generate these "revenues." Starting in 2005, all of the methane will run boilers and the fuel cell at South Plant and electricity generated will be "netted" against the electricity bills meaning that this will no longer count as "revenue."

WLR
WLR's entrepreneurial revenues include both operating and capital projects and are roughly equivalent between these two categories. Although not depicted on the graph, the amount of entrepreneurial revenue has been increasing since 2000 from $7.5 to $11.7 million. The future level of these revenues will likely decrease over time, due primarily to decreased federal funding availability. However, once WRIA recovery plans

are completed, WLR believes it will be very competitive for federal and state funds that may become available for restoration projects.

OUR STRATEGY

Developing new sources of revenue will continue to be an integral part of how the department does business for the foreseeable future. Given the unique and diverse business lines within the department, each division will continue to develop their own revenue goals to meet their business needs.

Parks

Parks will continue to implement its Revenue Enhancement Strategic Plan. The plan positions King County Parks as an advertising partner, program and event facilitator, media partner and entrepreneur. The division is building on successes such as the Group Health Velodrome naming rights, the US Bank Concerts at Marymoor title sponsorship, the two new SUBWAY restaurant locations at the Weyerhauseur King County Aquatic Center and Marymoor Park; ball field advertising programs, expanded concession agreements, enhanced picnic shelter rental facilities, and new revenue producing amenities such as slides at county pools. The division continues to implement the Partnership for Parks program.

Staff pursue revenue-generating opportunities by continuing to meet with and coordinate revenue based proposals with corporate entities; continuing exploratory meetings with media partners for event and program promotion, sponsorship and revenue based initiatives. Staff issue an annual Request for Ideas & Proposals as well as specific Request for Proposals to generate new profit centers and lines of business for the division.

SWD

SWD anticipates generating some entrepreneurial revenue in the future by maximizing revenue from existing capital assets. The ongoing savings package in the 2004 SWD Business Plan included finding new revenue sources. In 2005, the division is doing a pilot study, including feasibility and practicality, of placing advertising signs on the division's trailers. Revenue from cell towers may still be possible, but not until certain accounting issues have been resolved.

WLR

Under its new business plan, WLR will focus on receiving full cost recovery under contracts and providing services that are not available from other providers.

WTD

WTD's entrepreneurial activities focus on using waste material as resources wherever possible and on seeking cell tower tenants. Due to adopting recommended accounting changes, the largest source of previous entrepreneurial revenue from WTD (biogas) will not be included in future revenue targets.

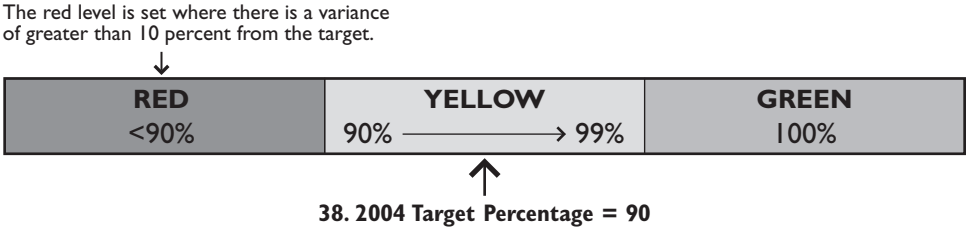
RATING

Results and Target

2004 Results: 90 percent of target
2004 Target: 100 percent
Entrepreneurial revenue targets are for the current year only.

2005 Targets:
Parks: $1.14 million
SWD: $0
WLR: $9.71
WTD: $0
DNRP Total: 100 percent of $10.85 million

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE:

Solid Waste Division 2004 Business Plan; Parks and Recreation Division, Business Transition Plan: Phase II Report; Wastewater Treatment Division Productivity Initiative Annual Report; Water and Land Resources Division Finance Section.

OUTCOME: Department utility rates are reasonable and competitive

Efficiency of key operations

39

ABOUT THIS PERFORMANCE MEASURE

In addition to the other Price of Service measures already presented (Nos. 35-38), this measure includes a variety of formal efficiency measures. An efficiency measure is defined based on the relationship between inputs and outputs; or how well the agency used the resources in relation to the output produced.

Given that our department doesn't produce a single output, but many rather distinct outputs, this measure has a separate measure for each division. By design, these measures are meant to capture significant portions of each division's efforts. These efficiency measures should be looked at in conjunction with the agency performance measures and environmental indicators elsewhere in the report. The department wants to ensure that we are simultaneously producing the desired organizational and environmental results in the most efficient way possible.

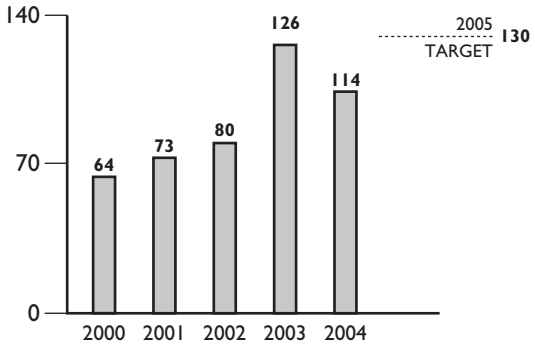
For Parks, the efficiency measure is the amount of Parks' acres per full time equivalent in the division. This measure is designed to track the ability of Parks to manage Parks' lands given a relatively static staffing level. For SWD, the efficiency measure is the transfer station operating costs per ton of solid waste. This measure tracks the operating costs at the division's 10 geographically dispersed transfer facilities (eight transfer stations and two drop boxes). For WLR, the efficiency measure tracks the total Surface Water Management (SWM) fee (including the Rural Drainage Program [RDP] fee) revenues per estimated number of acres in un-incorporated King County. This measure is designed to track the per acre cost to the division to produce desired outcomes with a declining revenue base. For WTD, the entire operating budget has been used in the efficiency measure: cost per pound of biological oxygen demand (BOD) and total suspended solids (TSS) removed. This measure shows the cost per unit effort of how much waste removal is achieved through the wastewater treatment process.

OBSERVATIONS

Parks

Through a combination of acquisitions and staff reductions, the Parks division is managing significantly more acres of park land per FTE than in previous years. Between 2002 and 2003 there was a dramatic reduction in staff while inventory remained fairly static. There was a slight downward dip between 2003 and 2004 due to vacant positions being filled but the division anticipates the staffing levels to drop slightly again before leveling off and remaining consistent. This requires a strategic work plan for dealing with a growing inventory and fairly static staffing levels.

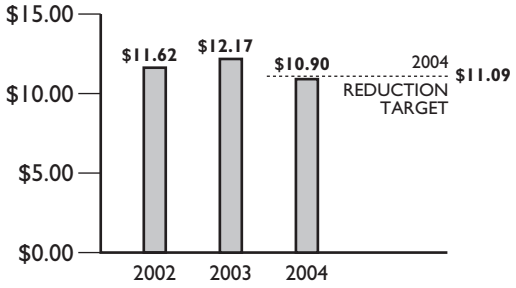
Parks acres per FTE



SWD

SWD's operating costs include labor costs for transfer station staffing (Transfer Station Operators and Scale Operators), utilities, equipment repair and maintenance, and equipment replacement. Estimates for 2002 - 2004 are based on actual labor and utility costs and estimated equipment related costs. The total is divided by transfer system tonnage. The 2005 target is based on budgeted labor costs for transfer station staffing.

Transfer station operating costs per ton of solid waste



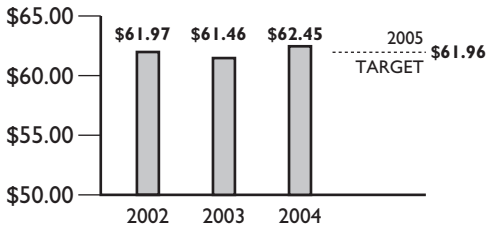
This performance measure includes costs for commercial and self-haul customers at all Solid Waste Division facilities, including rural transfer stations and drop boxes. The cost per ton does not include transport of waste to Cedar Hills.

One important factor driving the declining cost per ton in 2004 and 2005 is the reduction in regional direct tons and the corresponding increase in transfer station tonnage. A portion of our staffing costs are fixed and the tonnage shift allows us to spread these fixed costs over more tons.

WLR

Estimated average acres for unincorporated King County from 2002-2004 have remained relatively stable (305,506 acres for all three years presented). Due to pending annexations and incorporations this situation is expected to change in the next five years. The acreage data do not include the Forest Production District in the most eastern part of King County.

WLR operating revenue per unincorporated acre



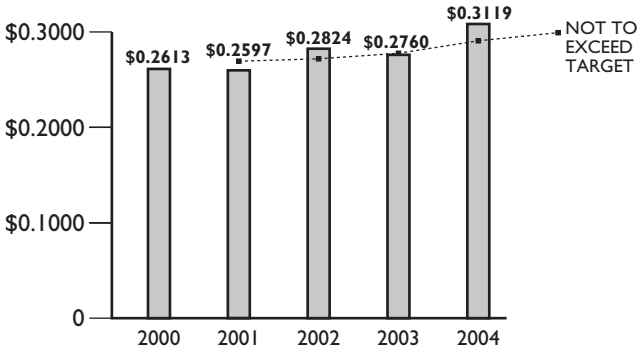
The current SWM program revenue, when described on a per acre basis, supports a robust capital and operating management program that includes regulations, technical assistance, facilities maintenance, evaluation, and effective correction of threats to surface and groundwater due to runoff in urban, rural and agricultural lands throughout the service area. The program allows correction and prevention of threats to public safety and ecological integrity due to storm and surface water runoff. As the service area decreases in size due to annexations and incorporations, the revenue available for each acre is expected to decline. It may not be possible to maintain a robust program into the future without rate increases. This performance measure, in conjunction with the measures for agency performance, will help track the financial capacity of the SWM program.

WTD

WTD measures efficiency as cost per pound of Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) removed during the treatment process. Both of these parameters are measured in treatment plant influent and effluent in mg/L and then converted to pounds. This is a measure of WTD's total efficiency as an agency so it includes all costs that the division has some control over: operating budgets for the treatment plants and support services located in King Street Center, the Environ-

mental Laboratory, and Industrial Waste. It does not include capital costs or administrative costs WTD pays to other agencies.

Cost per pound of biological oxygen demand and total suspended solids removed during treatment process



The division's target is for the cost to increase no more than the rate of inflation, a target that requires savings through the Productivity Initiative. In 2004, WTD did not achieve its target. The cost per pound was $0.3087 compared to a target of $0.2907. Anticipated savings related to high solids centrifuges, energy management, reclaimed water, and overtime did not materialize, nor did increased revenues projected from the West Point cogeneration project. Combined performance of business plan savings items yielded $1.2 million in savings, about 20 percent less than what had been projected. Savings that were achieved included a vacancy rate of three percent, reductions in administrative staff and increased revenues from chemical toilet waste and the capacity charge.

This measure is affected both by actual costs of operation and by variability in the pounds of BOD and TSS coming into the plants. The amount of BOD and TSS can be affected by rainfall and industrial activity and the amount reported can be affected by and measurement variability and technique. For example, West Point changed its measurement method due to its NPDES permit and this resulted in a small decline in the measured amount of BOD. Typically, BOD and TSS vary by a greater percentage than expenditures. Because so much of WTD's operating budget is base costs that WTD incurs regardless of a yearly change in the BOD and TSS removed, the year-to-year variations are not as meaningful as the trend over time.

OUR STRATEGY

The AGA peer review of the *Measuring for Results - 2003* report indicated that performance reports should present efficiency measures to enable "readers to evaluate the efficiency and cost effectiveness with which resources have been used." These new efficiency measures, as well as departmental budget information presented in Appendix I, are designed to meet this important need.

Parks

Parks plans to acquire key properties while maintaining current staffing levels. By increasing volunteer efforts through our programs, such as Park Ambassadors, Adopt-a-Park, and Community Partnership Grants, and continuing our partnerships with agencies, such as the Washington Trails Association and Earthcorps, we hope to continue to improve our existing service levels.

Parks will strive to manage park lands cost-effectively, within the restrictions of the acquisition funding sources. Prior to acquisitions funding to support the annual cost of the land management plan will be identified. This type of pre-acquisition evaluation

will avoid costly liabilities, such as environmental hazards (such as mine shafts, methamphetamine labs, noxious weed infestations), and recognize existing inappropriate public uses, which may require costly management.

Factors considered in site maintenance plans include:

1. Public and employee safety (for example: injury may result if maintenance action not taken)
2. Mandated requirements subject to potential fines if not performed (for example: various required permits, sensitive areas protection, ESA, integrated pest management, drainage maintenance)
3. Scheduled (revenue generating) use of park assets (for example: athletic leagues, picnics, weddings, large special events, revenue would be lost if maintenance action is not taken)
4. High community expectations and visibility projects (for example: East Lake Sammamish Trail, new athletic fields or community centers)
5. Storm damage and other natural event problems to the park system
6. Preserve and protect projects (for example: roof repairs or field maintenance, if not done, further damage occurs)
7. Unscheduled public use (for example: trail use, drop in athletic play, dog-off leash use)

SWD

The Solid Waste Division is undergoing a multi-year process to improve the efficiency of its operation, guided by the 2004 Business Plan. Beyond increasing the number of tons in the transfer cost per ton measure, the most important initiative that affects the transfer costs was to better match facility operating hours to demand. Rural facilities, where tonnage is very low, are now open for 40 hours per week instead of 70 hours. On the other hand, one of the urban facilities is now open around the clock on weekdays and another is open from 6:15 a.m. until 11:30 p.m. SWD will adjust hours in the future, on an as needed basis, to ensure that the division is maintaining both an efficient operation and appropriate service levels.

WLR

WLR is anticipating a significant decline in unincorporated acres in the next two to five years due to annexations and incorporations. This decline in acreage will impact the revenues collected since fees are collected on the basis of effective impervious area. As acres decline, it is anticipated that efficiency may also decline because certain programs (like NPDES permit monitoring) are shared service area-wide. WLR is continuing to develop and review performance data to identify those programs that will most effectively meet the needs of surface water management in rural King County.

WTD

WTD's strategy for maintaining efficiency consists of its Productivity Initiative, an effort to improve how the entire wastewater treatment program delivers its services to the public. The Productivity Initiative includes business plans to identify specific savings, a balanced scorecard performance measurement system to measure performance, and an incentive fund to return savings to employees as well as ratepayers.

RATING
Results and Target

37a. Parks
2004 Results: 114 acres/FTE
2004 Target: none, new measure established in 2005

37b. SWD
2004 Results: 102 percent ($10.90)
2004 Target: 100 percent ($11.09)

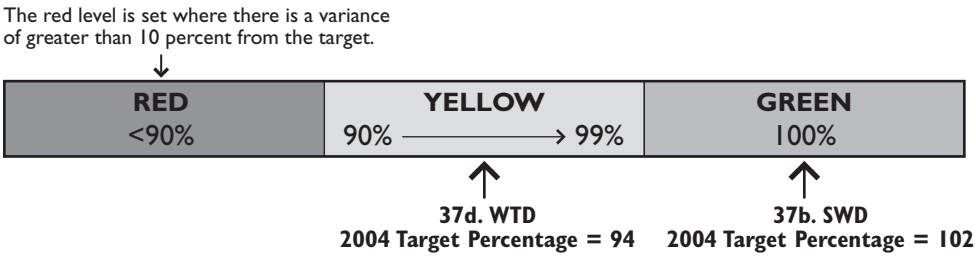
37c. WLR
2004 Results: $62.45
2004 Target: none, new measure established in 2005

37d. WTD
2004 Results: 94 percent of target met ($0.3087)
2004 Target: 100 percent

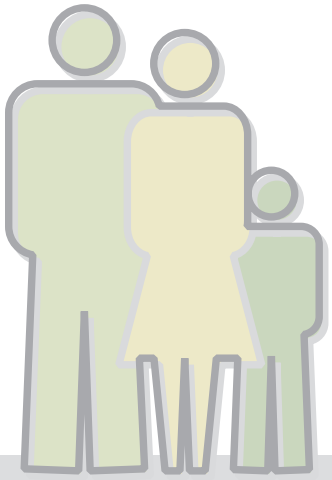
Efficiency targets are for the current year only.

2005 target:
Parks: 130 acres per FTE
SWD: $9.89 per ton
WLR: $61.96 of operating revenue per acre
WTD: $0.2987 per pound of BOD & TSS removed

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE
Solid Waste Division 2004 Business Plan; Parks and Recreation Division, Business Transition Plan: Phase II Report; Wastewater Treatment Division Productivity Initiative Annual Reports, division budget data.



CUSTOMER SATISFACTION

OUTCOME: Customers are satisfied with the services and benefits they receive

Customer Satisfaction Ratings for DNRP Services and Programs

40

ABOUT THIS PERFORMANCE MEASURE

Customer service is a cornerstone of good performance. The challenge for a large, complex organization is to determine what specific aspects of its operations merit customer feedback. Rather than ask a generic, broad-based customer satisfaction question to residents, each division has chosen specific groups of customers on which programs have a direct impact. In most cases, "customer" refers to targeted segments of the public who have requested services or participated in a DNRP program; in one case (wastewater treatment), customers are municipalities who directly use our services rather than individual residents.

Parks conducted its first customer service survey in 2003. The on-line survey was publicized through newspaper stories and regional user groups. More than 1,100 people took the survey to provide feedback on a number of subjects. The 2004 survey had 273 respondents. The customer satisfaction rating includes questions related to the cleanliness, safety, and attractiveness of parks, as well as staff helpfulness, friendliness, and reservation procedures.

For SWD, customer surveys are done with transfer station and Wastemobile customers as well as participants in secondary schools education programs. The transfer station survey is conducted every two years. The Wastemobile Education Program informs King County residents about waste reduction, proper management and recycling opportunities related to household hazardous waste. SWD provides educational programs on recycling, waste reduction, and resource conservation to students in grades 1 through 12, and on household hazardous waste to teachers of grades 4 through 12 and their students. A variety of educational approaches are used including workshops, classroom presentations, interactive assembly shows, and classroom and community projects.

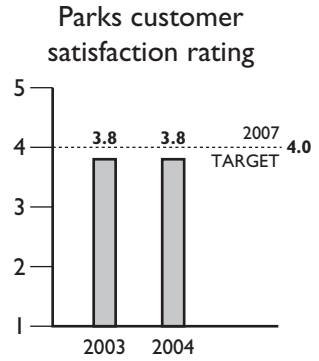
WLR used customer feedback related to their drainage complaint services. The Stormwater Services section of the division distributes survey cards to residents that have registered a drainage complaint.

WTD used data from their Wastewater Contract Services survey, which assesses the attitudes of component agencies that have sewer service agreements with WTD. WTD also receives customer satisfaction information from industrial discharge permit holders, via a survey conducted every two years.

OBSERVATIONS

Parks

Customer satisfaction remains a key factor to Parks' success. This is the second survey since park transfers, budget cuts, and the reorganization. Due to rounding, the 2004 results are essentially the same as last year's, except that some areas that make up the overall score were improved (reservation procedures and cleanliness). In the overall 3.8 rating, facilities received higher ratings than staff and reservations, indicating areas for future improvement.



39a. Parks Customers

SWD

Customer satisfaction at the transfer stations once again met the target. These results are significant because there have been many changes and disruptions at several stations including hours of operations, tonnages received, and staff changes. Tonnage at two stations went up 31 and 69 percent after the regional direct rate increase. Despite all these impacts on the system, customers again had high satisfaction with the division's services.

39b. Transfer Station Customers

Customer satisfaction with Wastemobile education specialists continues to be very high. Wastemobile survey results not included as part of the customer satisfaction measure show that days and hours of operation and distance to the Wastemobile from their home time are areas for future program improvement. Based on feedback regarding days, hours of operation and distance to the Wastemobile from customers' homes, the division is now providing permanent household hazardous waste collection service at the Factoria Transfer Station. Based on high participation levels, eastside residents appear to be very satisfied with the service.

39c. Wastemobile

In addition to questions on satisfaction and learning, the 2003-04 school survey also asked elementary teachers to report any activities they did or behaviors they changed with their classrooms as a result of the program. Over 60 percent said their classroom had started or improved recycling habits as a result of the program. Over a quarter said they had reduced classroom or lunchtime waste and over 20 percent noted there was less littering and more litter pick-up by their

39d. Solid Waste Education Programs

students. These teachers and students have translated Solid Waste Division messages into constructive actions, a further indication of the program's effectiveness.

WLR

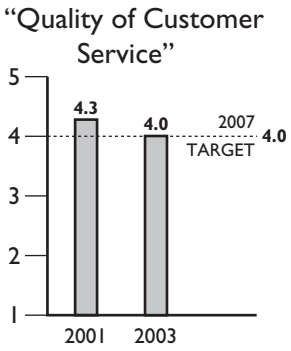
The Stormwater Services section has been collecting customer feedback for nine years to track, modify, and improve how engineers and technicians treat and respond to customer needs. The number of residents that respond to the Stormwater Services customer complaint cards correlates with rain events so that during rain events more survey responses are received. Stormwater Services used responses to track attitudes and levels of customer service. Training and education were offered to staff when performance measures fell below goals. The success of this effort is reflected in the very high ratings.

39e. Drainage Services

WTD

Municipal wastewater service contract customers provided an overall good customer satisfaction rating. This rating has remained above the target level for the past two years. Budget considerations caused the Industrial Waste Program survey to be changed from biannual to a triannual survey. The next survey will be done in 2006.

39h. Wastewater Contract Service Customers



39i. Industrial Waste Customers

Parks
Areas receiving lower ratings will be examined and addressed. Staff helpfulness and friendliness along with reservation procedures are areas for potential future improvement. In addition to the annual online survey, Parks is planning to have a real-time, online customer feedback system to capture customer information. Associated with the software adoption, Parks staff will receive training on customer satisfaction.

SWD
The division is changing operating hours at several stations to accommodate the increased demand from hauler customers, primarily due to the increased regional direct rate. The entire transport system is under review and analysis for improvement as the region prepares for waste export over the next 10 years. This will result in significant capital improvement and construction activity at urban stations that could impact customer satisfaction. In 2006, the First Northeast Station will undergo major remodeling and will be closed for 14 months. Surveys will continue to be conducted every two years to monitor division service.

Educational programs are evaluated for teacher satisfaction using written surveys, and for student learning using pre- and post-tests. Evaluation results are used to make adjustments to programs to ensure that teacher and student needs are being met. Since teacher satisfaction with the programs has been consistently high over the years, most of the program modifications have come as a result of student pre and post-test scores. When scores indicate that students already have a high awareness of a particular concept, the program is modified to incorporate new, more complex material. The pre- and post-test scores continue to indicate significant increases in student knowledge over the years.

Several changes are being implemented at schools as a result of surveying efforts. One workshop will be canceled and several high school workshops will be improved by adding material commensurate with the grade level. Some of the high school workshops have not been sufficiently challenging for some high school students and programs will be adjusted in 2004-5.

WLR
WLR's 2004 Business Plan put a strong focus on key program areas, such as stormwater services and CAO implementation. In 2005, WLR will develop and implement a customer feedback process modeled on the current stormwater services system.

WTD
The Metropolitan Water Pollution Abatement Advisory Committee, made up of wastewater service contract customers, has moved from quarterly to monthly meetings. In addition, WTD and the committee have agreed to examine wastewater program issues of greatest concern to local jurisdictions. These developments should move us closer to the five-year target on customer satisfaction.

The Industrial Waste Program is working to maintain its high customer service rating by continuing its policy of being responsive to customer needs. The 2003 survey identified technical assistance as being a high priority for the customers. The program plans to focus its outreach efforts on technical assistance in 2005. In the 2006 survey, the program will seek clarification on the types of technical assistance desired by its customers.

RATING

Results, Target and Outcome

39a. Parks Customers
2004 Results: 3.8 out of 5
2007 Target: 4.0
Outcome: 4.0

39b. Transfer Station Customers
2004 Results: 4.5 out of 5
2007 Target: 4.5
Outcome: 4.5

39c. Wastemobile Customers
2004 Results: 4.6 out of 5
2007 Target: 4.6
Outcome: 4.6

39d. Solid Waste Education Programs
2004 Results: 4.4 out of 5
2007 Target: 4.5
Outcome: 4.5

39e. Drainage Services
2004 Results: 93 percent
2007 Target: 90 percent
Outcome: 90 percent

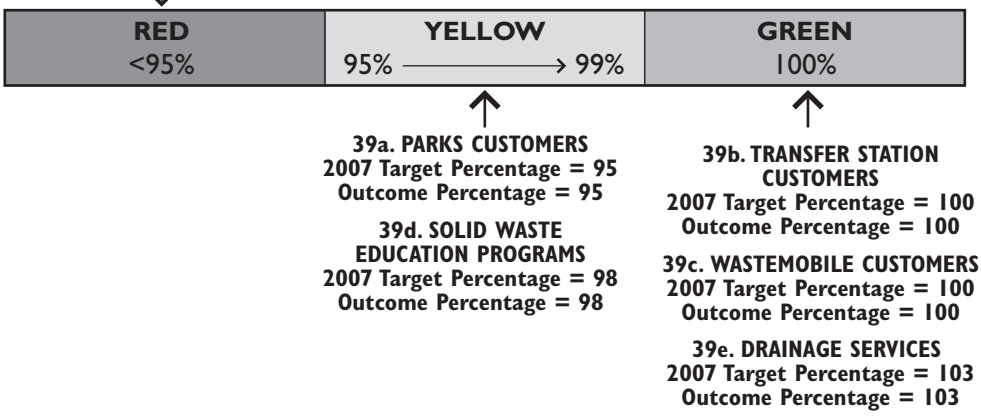
39f. Wastewater Customers
2004 Results: 4.3 out of 5
2007 Target: 4.0
Outcome: 4.0

39g. Industrial Waste Customers
2003 Results: 4 out of 5
2007 Target: 4
Outcome: 4

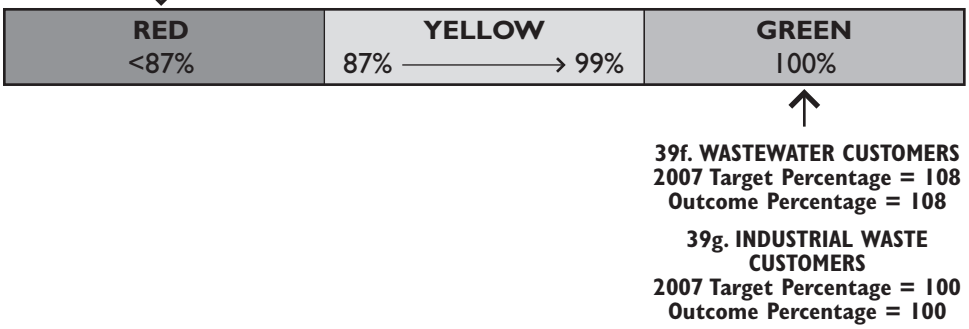
The long-term outcome is a high degree of customer satisfaction (scores of 4 to 4.5 on a 5-point scale or 90 percent or higher) based on a variety of customer satisfaction surveys.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings

Red level for almost all customer satisfaction scores is set where a lower score would require immediate attention or is considered critical.



For the two WTD customer measures with outcomes set at 4, the red level represents a score below 3.5 out of 5. This level is somewhat lower due in part because a higher score for the Industrial Waste program may mean that the regulatory program is being too lenient.



DATA REFERENCE

WLR, SWD, and WTD; 2004 Transfer Station Customer Satisfaction Survey; Wastemobile Visitor Satisfaction – On-Site Survey; King County-Solid Waste Division Evaluation of the KC-SWD Elementary, Middle, and High School Waste Reduction and Recycling Education Programs; 2004 Water and Land Resources Division Business Plan; Industrial Waste Program Customer Survey Research Report, 2003; 2004 WTD Balanced Scorecard Survey.

EMPLOYEE INVOLVEMENT AND MORALE

OUTCOME: DNRP consists of a forward thinking workforce where employees are engaged in our business, involved in decisions that affect them, and understand their role in achieving the DNRP vision

Employee rating of workplace practices

41

ABOUT THIS PERFORMANCE MEASURE

One important aspect of employee involvement and morale is the degree to which employees believe their workplace is a positive working environment. Effective organizations require a culture that promotes excellence, innovation, customer orientation and accountability. This measure, on workplace practices, focuses on employees' ratings of a variety of management practices, leadership and decision-making issues.

Ten separate questions from the DNRP employee survey are clustered together to derive a composite score for this performance measure. The score is on a one to five scale, with five being the highest. Questions in this measure cover a wide range of issues including: employee accountability; management behavior and responsiveness; openness to new ideas; the effectiveness of teams; the degree of cooperation between management and unions; and providing quality services to customers.

The first two bars in the graph reflect scores from the initial 2000/2001 survey compared with the 2002 survey using identical questions. The second two bars reflects a new baseline in which some of the questions in the 2002 survey differ from the items included in the 2000/2001 survey and therefore the previous scores are not strictly comparable. The 2004 survey was identical to the 2002 survey.

OBSERVATIONS

The scale for questions included in this measure is: strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. A three out of four rating equates to a "neither agree nor disagree" answer. This measure had the lowest score of the four employee-related measures, only slightly above the midpoint on the 5-point scale.

OUR STRATEGY

The DNRP management team is evaluating issues of organizational accountability that arose from questions associated with this measure. Divisional focus groups identified areas of common concerns and strategies for improving accountability are being

developed and implemented at both the division and department level. As a result of this work, the department director has implemented a new performance appraisal approach for managers that report directly to her. Additional actions include training supervisors to deal with harassment and disruptive behavior in the workplace and increased coordination of disciplinary actions by Human Resources.

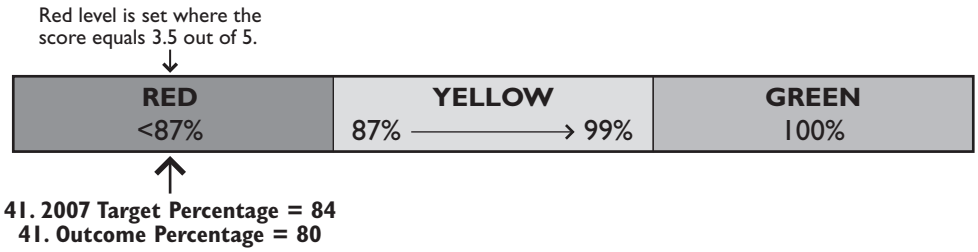
RATING

Results, Target and Outcome

2004 Results: 3.2 out of 5
2007 Target: 3.8
Outcome: 4.0

The long-term outcome for this measure is a 4.0 rating.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP Department-wide 2004 Employee Survey Research Report.

OUTCOME: DNRP consists of a forward thinking workforce where employees are engaged in our business, involved in decisions that affect them, and understand their role in achieving the DNRP vision

Employee rating of the availability of resources

42

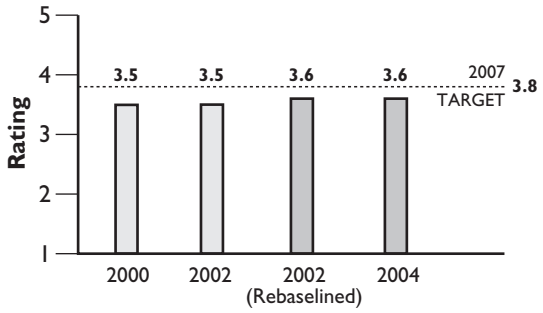
ABOUT THIS PERFORMANCE MEASURE

One aspect of employee morale is that employees have the necessary resources required to do their jobs. Resources in this context are considered broadly and include information, equipment, tools and supplies. This measure focuses on employees' ratings of the availability of those critical resources.

Four separate questions from the DNRP employee survey are clustered together to derive a composite score for the performance measure. The score is on a one to five scale, with five being the highest. Questions included in this measure included: access to equipment, tools and supplies; receiving information in a timely manner; clear understanding of job expectations; and investments in improving employee skills.

The first two bars in the graph reflect scores from the initial 2000/2001 survey compared with the 2002 survey using identical questions. The second two bars reflects a new baseline in which some of the questions in the 2002 survey differ from the items included in the 2000/2001 survey and therefore the previous scores are not strictly comparable. The 2004 survey was identical to the 2002 survey.

Employee rating of available resources



OBSERVATIONS

The scale for questions included in this measure is: strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. A four out of five rating equates to an "agree" answer. The score for this measure indicates that the department can go further in improving the availability of resources for employees.

OUR STRATEGY

In response to the initial employee survey and division initiatives, training to meet business needs and access to equipment and information has been targeted. Each division regards training and staff development as key factors to achieve their business objectives. DNRP has a 100 percent target for all supervisors and managers to complete four training modules on "Managing Individual Performance," which includes clearly communicating job expectations.

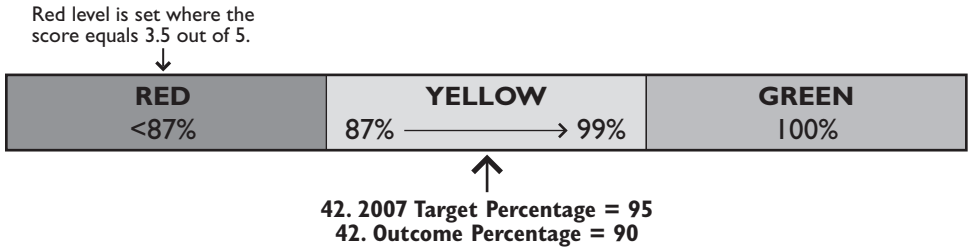
RATING

Results, Target and Outcome

2004 Results: 3.6 out of 5
2007 Target: 3.8
Outcome: 4.0

The 2007 target for this measure is set below the 4.0 outcome due to expected impacts from the county's ongoing budget issues. The long-term outcome for this measure is a 4.0 rating.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP Department-wide 2004 Employee Survey Research Report.

OUTCOME: DNRP consists of a forward thinking workforce where employees are engaged in our business, involved in decisions that affect them, and understand their role in achieving the DNRP vision

Employee rating of job satisfaction

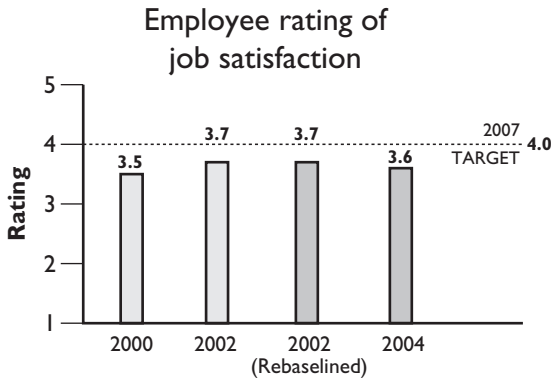
43

ABOUT THIS PERFORMANCE MEASURE

Job satisfaction is one of the most important features of employee morale. Satisfied employees contribute to higher quality service and productivity for the organization. This measure focuses on employees' ratings of their satisfaction, their value to the organization, and communication between employees and their supervisors.

Ten separate questions from the DNRP employee survey are clustered together to derive a composite score for this performance measure on a one to five scale, with five being the highest. Questions included in this measure included: overall job satisfaction; satisfaction with involvement in decision-making; feeling valued for work done by the employee; a spirit of teamwork and cooperation; and supervisory-employee communications.

The first two bars in the graph reflect scores from the initial 2000/2001 survey compared with the 2002 survey using identical questions. The second two bars reflects a new baseline in which some of the questions in the 2002 survey differ from the items included in the 2000/2001 survey and therefore the previous scores are not strictly comparable. The 2004 survey was identical to the 2002 survey.



OBSERVATIONS

The scale for questions included in this measure is: strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. A four out of five rating equates to an "agree" answer. The score for this measure shows that employees have slightly increased job satisfaction and that the department has opportunities to increase this score in the future. Potential external factors that influence this measure include the general state of the economy and diminishing continuing county budget resources.

OUR STRATEGY

Employee job satisfaction remains an important issue at DNRP. Despite programmatic efficiencies that impact every aspect of the department, including staffing levels, DNRP

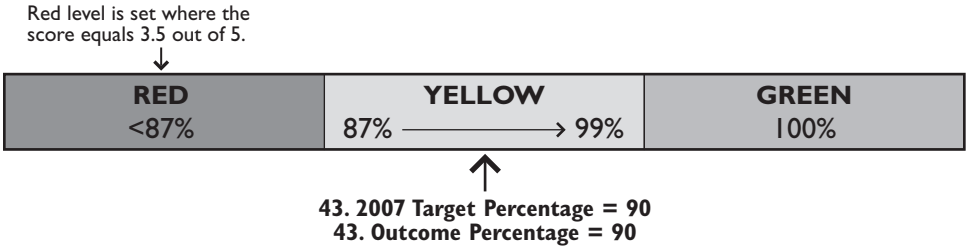
strives to create a positive work environment. For example, all DNRP supervisors and managers are expected to complete a series of 22 trainings that include team leadership skills and coaching individuals for improved performance.

RATING

Results, Target and Outcome

2004 Results: 3.6 out of 5
2007 Target: 4.0
Outcome: 4.0
The long-term outcome for this measure is a 4.0 rating.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP Department-wide 2004 Employee Survey Research Report.

OUTCOME: DNRP consists of a forward thinking workforce where employees are engaged in our business, involved in decisions that affect them, and understand their role in achieving the DNRP vision

44

Employee Rating of Their Role

ABOUT THIS PERFORMANCE MEASURE

Employees need to see the connection between their specific contribution and the overall success of their organization. This is an important element to instill a sense of personal accomplishment. This measure focuses on employees' ratings of their own role in the organization.

Three separate questions from the DNRP employee survey are clustered together to derive a composite score for this measure. The score is on a one to five scale, with five being the highest. Questions included in this measure included: employees' contribution to the success of the department; comfort in making day-to-day decisions about work; and the importance of holding people accountable.

The first two bars in the graph reflect scores from the initial 2000/2001 survey compared with the 2002 survey using identical questions. The second two bars reflects a new baseline in which some of the questions in the 2002 survey differ from the items included in the 2000/2001 survey and therefore the previous scores are not strictly comparable. The 2004 survey was identical to the 2002 survey.

Employee rating of their role

OBSERVATIONS

The scale for questions included in this measure is: strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. A four out of five rating equates to an "agree" answer. The score for this measure was the highest of the four employee survey-related measures.

OUR STRATEGY

The department has maintained a long-term commitment to employee involvement and valuing our employee contributions. This rating shows that our efforts have resulted in a very positive view of the employee's role in the agency.

RATING

Results, Target and Outcome

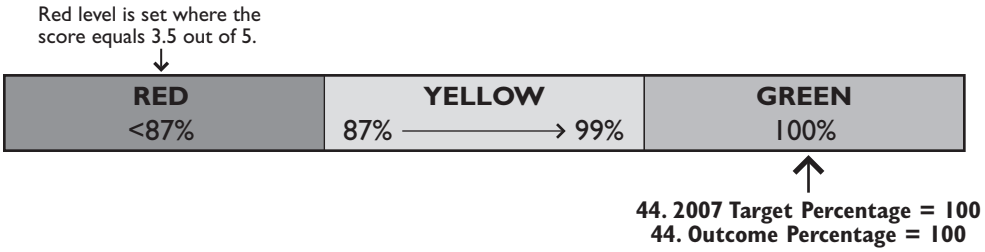
2004 Results: 4.1 out of 5

2007 Target: 4.1

Outcome: 4.1

The target and long-term outcome for this measure is to maintain the 4.1 rating.

Performance-to-Target and Performance-to-Outcome Ranges and Ratings



DATA REFERENCE

DNRP Department-wide 2004 Employee Survey Research Report.

CONCLUSIONS

This annual performance measure report portrays the diversity and complexity of the issues DNRP addresses. The report is designed to inform discussion on both the agency's performance and broader environmental conditions. Using the information in this report, we hope to answer some key questions:

- Are we progressing in meeting our desired outcomes and goals?
- What programs require new strategies or additional, focused attention?
- How can we best prioritize our services with reduced financial resources?

There are several key ways to look at our performance information. One level of analysis is to group each of the measures by the seven departmental goals. Another level of analysis is to look at all of the indicators and measures to assess overall performance. Lastly, by discussing the issues associated with each performance category (green, yellow, red) managers and decision-makers can focus attention, and resources, on areas that have not yet met targets or need additional attention. The summary of all indicator and measure ratings can be found as a fold-out diagram on the *inside back cover.*

ARE WE ACHIEVING OUR GOALS?

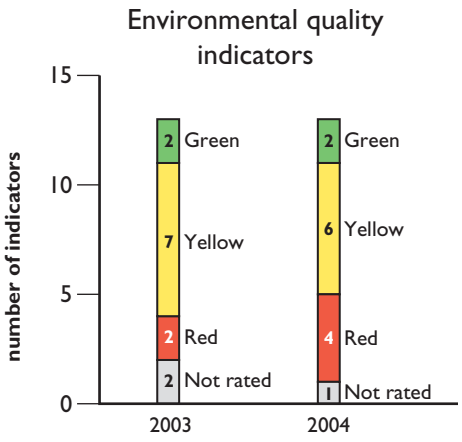
This section describes the measures and indicators in context of how we are meeting our departmental goals. By breaking out the data by individual goal, we can see areas that require more attention or those that are doing relatively well. Since we are three years into measuring our performance we are focusing on our performance compared to our 2007 targets. Upon reaching our five-year target year in 2007, we will also assess how we are doing relative to our outcomes in more detail.

Environmental Quality

In the environmental quality goal area, we have a combination of 13 environmental indicators and 11 agency measures. Within several topics, there are multiple ratings due to the differentiation between sampling near outfalls (measures) and ambient locations (indicators). We are treating each of these ratings as individual ratings and therefore have, this year, a total of 24 environmental quality ratings. The one indicator still being developed (normative flows) is not rated.

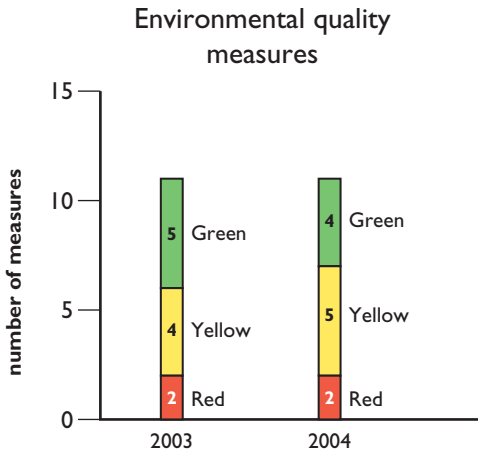
Indicators

Only two of 12 rated indicators are attaining the target (green), while six are below the target (yellow), and four are significantly below the target (red). Further attention would be needed to improve the marine beach bacteria indicator (No. 6a), dissolved oxygen ambient standard (No. 7d), the Water Quality Index (No. 13), and the salmon recovery indicator (No. 17). Each of these areas below the target may require additional levels of effort, combined with inter-jurisdictional collaboration, and in many cases additional resources, to address these issues.



Measures

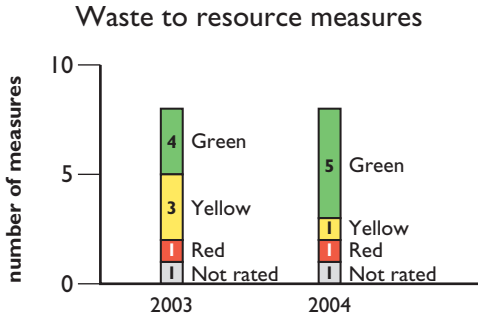
Four of 11 measures are already attaining targets and five are not yet attaining targets. Two measures, for greenhouse gas emissions and managed lakes, need attention. To improve performance on the greenhouse gas measure (No. 3), DNRP is making critical infrastructure investments that require time to implement. The managed lake measure (No. 9b) shows that small changes in lake quality can change the status of this measure. The marine bacteria measure, which was red last year, has moved into the yellow category in 2004.



There are several conclusions that can be drawn from the differences between agency performance measures and environmental indicators. One conclusion is that since DNRP, by design, has more control over performance measures we ought to show better results than the environmental indicators. Another conclusion is that despite relatively strong agency performance, the environment is continuing to show negative impacts due to patterns of development and activities within the county. Although these findings are not entirely surprising, given that the indicators are intended to show environmental conditions beyond the control of DNRP and even county government, it does highlight the need to work collaboratively with other jurisdictions, residents, and businesses to address these ongoing concerns. It also highlights the fact that both freshwater and marine environments need a variety of strategies such as education, capital investment, and regulations to yield positive long-term results.

Waste to Resource

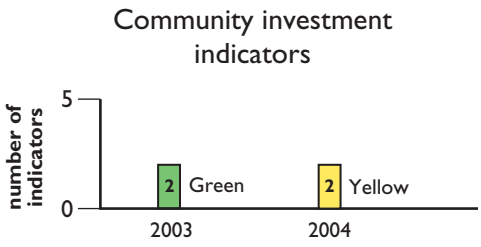
Five measures are meeting 2007 targets, one is just below the target, and one measure is red and needs attention. The one measure just below the target, waste stream recycled (No. 22), is now yellow because SWD increased the 2007 target; if the target had remained the same then the measure would have turned green. The one red measure needing attention, waste disposed per employee (No. 23b), decreased from last year but still exceeds the national benchmark. This may be a result of issues with the statewide non-residential data collection system or the decreased number of employees due to recent economic conditions, which in turn impacts the "per employee" rate.



Community Investment

Indicators

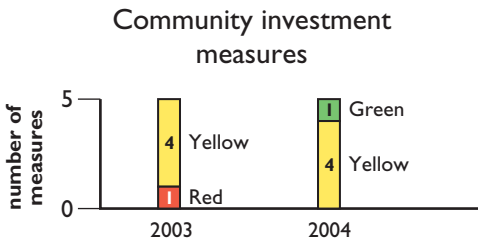
Agricultural and forestlands both declined very slightly, putting them in the yellow category. Despite the fact that our data show agricultural lands decreased by nine acres and forest lands by 3,000, there remains a fair



degree of uncertainly with our data collection process so that this may be within our margin of error. The department will be tracking this to make sure this is not a trend that continues and will be working on improving the data collection process.

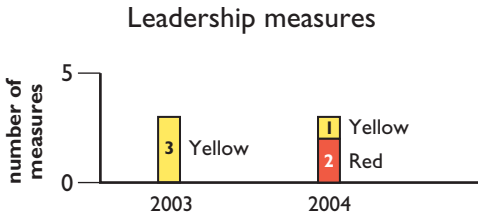
Measures

The community investment goal area has seen some improvement over last year with one measure green, four measures designated yellow, and none designated red. The Parks volunteer measure (No. 27) exceeded the 2007 goals in 2004, quite an accomplishment given the ambitious nature of that particular target. All yellow measures from last year improved, some quite dramatically, and agricultural lands with BMPs (No. 31) changed from red to yellow based on 2004 results. Even with these improvements, this goal area will require sustained attention to realize our 2007 targets for all measures.



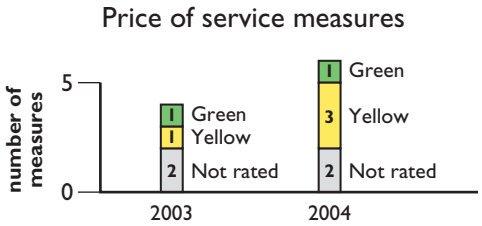
Leadership

These three measures (Nos. 32-34) of local jurisdictions' perspectives about DNRP all remained below high targets. Because there was a significant change in methodology for collecting the leadership data from previous years it is inappropriate to compare the results directly with previous years. There is still room for improvement in the number of jurisdictions that provide us feedback and their overall assessment of the agency. In addition, obtaining high ratings will require additional levels of effort and potentially new strategies.



Price of Service

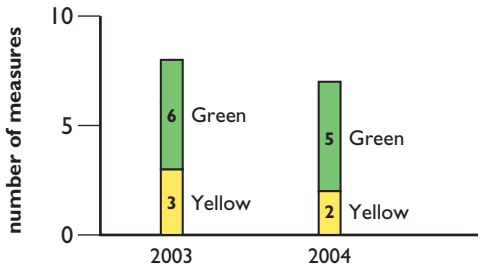
One measure met the target, three measures were below targets, and two measures are not rated. This is a decline from last year when entrepreneurial revenue targets were obtained. The entrepreneurial revenue measure (No. 38) and new efficiency measure (No. 39) show that DNRP was below its targets for new revenue and system-wide efficiencies. The targeted cost savings measure (No. 37) shows that department-wide results were below previously identified cost savings targets. In contrast to all of the other measures that have five year targets projected, all of the financial targets are determined on an annual basis and projected for the "upcoming" budget year (in this case 2004).



The two non-rated price of service measures developed to qualitatively compare our rates with other jurisdictions (No. 35) and inflation (No. 36) show that our rates are generally in line with these two important benchmark references. Parks is the clear exception due to recent changes in business practices and fees adjusted to meet revenue expectations.

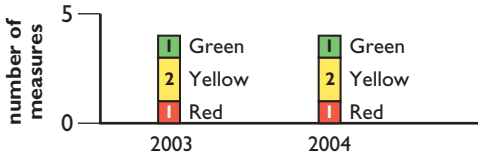
Customer Satisfaction
Customer satisfaction levels remain quite high for a variety of DNRP customer groups. The customer satisfaction measure has seven sub-measures (No. 40a-g), five of which are meeting high 2007 targets and two of which are below their 2007 targets.

Customer satisfaction measures



Employee Involvement and Morale
One employee measure is meeting its 2007 target, two are below 2007 targets, and one needs attention. The workplace practices measure (No. 41), which encompasses workplace accountability, is the only measure that rates below a 3.5 on a 5-point scale and is considered red. The scores and ratings for all four of these measures did not change from the previous year.

Employee involvement and morale measures

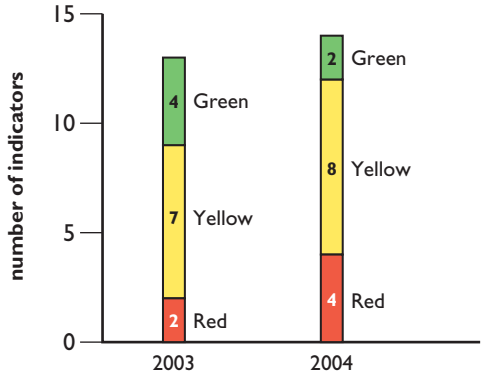


OVERALL PERFORMANCE

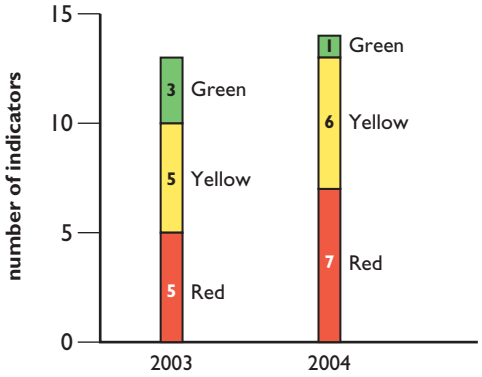
Indicators
There are 12 rated environmental quality indicators and two community investment indicators (agricultural and forest lands). Out of a total of 14 indicators, two are currently meeting the target, eight are not yet meeting or are below the target, and four need attention.

In comparison to the long-term outcomes, one is currently meeting the outcome, seven are not yet meeting the outcome, and seven need attention. Given these indicators' inherent long-term nature, the complexity in improving these broad indicators, and the high level of the desired result that has been set to attain the outcome, it is not surprising that a greater proportion of the indicators are in the yellow and red categories.

Indicators compared to 2007 targets



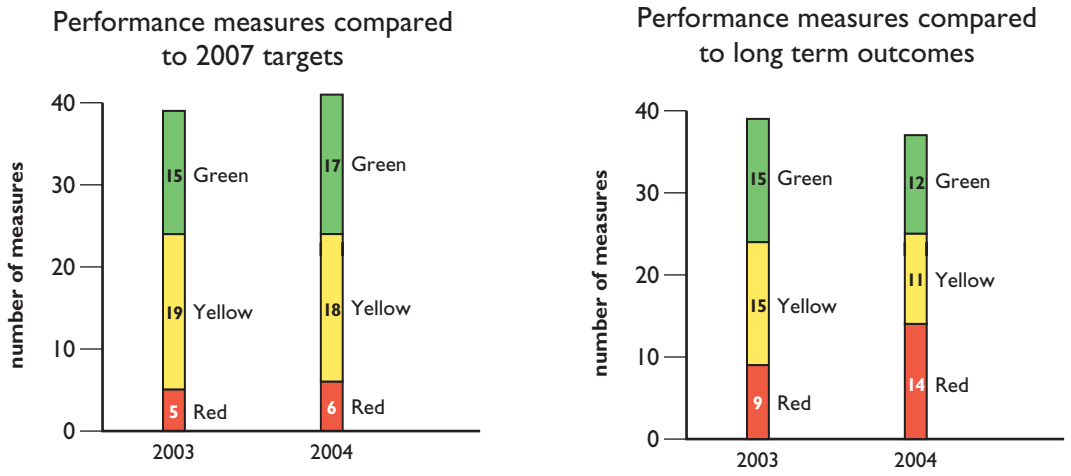
Indicators compared to long term outcomes



Performance Measures

Out of a total of 41 rated performance measures, 17 are currently meeting the target, 18 are not yet meeting or are below the target, and six need attention. The six measures needing attention (greenhouse gas emissions, phosphorus in managed lakes, waste disposed per employee, DNRP as a resource, DNRP as a leader, and workplace practices) will require quite different strategies to improve (see individual measure "Our Strategy" sections for more detail).

Of the 37 measures with long-term outcomes, 12 measures are currently meeting the long term outcome, 11 are not yet meeting the outcome, and 14 need attention. On the positive side, this shows that a significant number of measures are already at the long-term desired outcome. In addition, given that the long-term desired outcomes are set very ambitiously, it is not surprising that a majority of the measures are not in the green category. However, it shows that we clearly need to make significant progress to achieve our desired organizational outcomes.



Note: Some financial measures do not have long-term outcomes so that totals are different between the two graphs.

WHERE DO WE NEED TO FOCUS SPECIAL ATTENTION?

Although every measure requires some degree of continued attention to meet its performance target (for example, "maintaining" a baseline of 100 percent compliance for NPDES permits is still a significant effort), this section highlights measures where either:

1. continued, improved performance is needed, or
2. specific attention is needed to get performance on track towards meeting a target or outcome.

One of our departmental goals is to be a "high performance regional environmental and resource management agency." Rather than be content with our existing performance, in 2002 we established ambitious five-year targets and long-term desired outcomes. This puts many measures into the yellow or red categories. In fact, many of the measures with a yellow rating already have quite strong performance but the stretch targets and outcomes indicate that we have not yet met our goals. Although it is likely to take many years, ultimately, we would like to have all of our agency performance measures in the green category.

The 17 performance measures that are already meeting targets still require attention to ensure that high performance is being maintained. The 18 measures that have not yet reached the 2007 target require ongoing attention since these measures need to show continued positive changes over the next three years to meet their targets. Measures in this group often require special attention as performance nears an anticipated target it may be increasingly difficult to get the last incremental performance improvement due to diminishing returns.

Given that there are six measures that are designated red compared to the 2007 targets and 14 measures designated red compared to the outcomes, there is a need for significant assessment of these measures. Measures designated as red require a broad examination of the:

- existing methods and strategies (are there alternative approaches?), and
- staff and budget resources (are we allocating and applying sufficient resources to meet the desired outcomes?).

Without specific, focused attention the performance of these measures will not improve to the point where we will meet our 2007 targets much less the even more ambitious outcomes.

WHERE DO WE GO FROM HERE?

Now that our performance measurement system has been established and in place for the last two years, we need to increase the use of the information to inform our decision-making at every level. From long-term strategic planning to informing operational decisions that directly impact our performance, these departmental measures and indicators are designed to inform our own operations and influence the ongoing public discussion about how to effectively and efficiently improve environmental conditions in King County.

There remain important questions about how we use these measures that need further exploration and definition:

- How can we better institutionalize the performance measurement process?
- How do we promote and encourage more extensive use of performance data in decision-making by the divisions, the department, and the county?
- What additional steps do we need to take to ensure that performance information is enhancing our operations, programmatic strategies, policy deliberations, and budget preparation?

As our staff, departmental and county management, elected officials, partner organizations, and the public become better informed about our performance, we hope that the dialogue around our performance, strategies, and desired outcomes increases. The department will continue to evaluate the indicators and measures and make adjustments as necessary to maximize our ability to meet or exceed our goals and accomplish the department's mission.

ACRONYMS

AMSA	Association of Metropolitan Sewerage Agencies
B-IBI	Benthic Index of Biotic Integrity
BMPs	best management practices
BOD	Biological oxygen demand
cfu	Colony forming units
CH_4	Methane
CO_2	Carbon dioxide
CRS	National Flood Insurance Program's Community Rating System
CSL	Cleanup Screening Level (or "minor adverse effects level")
CSO	combined sewer overflow
CUT	Current Use Taxation program
DOE	Washington Department of Ecology
DNRP	King County Department of Natural Resources and Parks
EDI	Energy Developments Inc.
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
KCE	King County Extension
MCL	maintenance correction letter
$MTCO_2e$	metric tonnes carbon dioxide equivalent
NIPFs	Non-industrial private forest landowners
NPDES	National Pollutant Discharge Elimination System
P/O	performance-to-outcome ratio
P/T	performance-to-target ratio
Parks	Parks and Recreation Division
RDP	Rural Drainage Program
SQS	Sediment Quality Standard (or "no adverse effects level")
SWD	Solid Waste Division
SWM	Surface Water Management
TSI-TP	Trophic State Indicator-Total Phosphorus

TSS	Total suspended solids
WLFFF	Water, Land, Forests, Farms and Food Team
WLR	Water and Land Resources Division
WQI	Water Quality Index
WRIA	Water Resource Inventory Area
WSU	Washington State University
WTD	Wastewater Treatment Division
WUTC	Washington Utilities and Transportation Commission

GLOSSARY

Ambient (measurement) – A measurement of the concentration of a substance or pollutant from a site not located near known sources of pollution. Used in contrast to outfall or point source sites.

Aquatic – Of or related to water; can refer to both freshwater and marine environments.

Bacteria – Microscopic living organisms; when present in soil, water or air can cause human, animal, and plant health problems. Bacteria can also aid in pollution control by metabolizing organic matter in sewage, oil spills, or other pollutants.

Balanced Scorecard – A performance measurement system used to track strategic objectives by looking beyond financial performance to include customer services, internal processes and people management. DNRP's Wastewater Treatment Division uses the Balanced Scorecard system.

Baseline (data) – Initial collection of data to establish a basis for comparison, evaluation, and target setting.

Benchmark – 1) an outcome with a specific target for achievement. Benchmarks are often time-bound (for example, achieve 100% compliance within two years); 2) a standard based on the performance of another organization or group of organizations (comparison typically made with organizations having similar characteristics and/or demographics); 3) The title of a series of reports reporting on status and trends of indicators in King County: King County Benchmarks.

Benchmarking – The process of continuously comparing and measuring a private and/or public organization against recognized leaders and similar organizations to gain information that will help the organization take action to improve its performance.

Benthic – Of or related to the bottom under a body of water. Can be used to describe environments or organisms.

Benthic Index of Biotic Integrity – A stream monitoring "report card" for measuring the health of the benthic community and for the stream ecosystem as a whole. The index is composed of ten metrics that measure different aspects of stream biology, including the diversity of macroinvertebrate species, number of macroinvertebrates, presence of macroinvertebrates that are tolerant and intolerant to pollution, reproductive strategy, feeding ecology, and population structure.

Biochemical oxygen demand (BOD) – A measure of the amount of oxygen consumed in the biological processes that break down organic matter in water. The greater the BOD, the greater the degree of pollution.

Biogas – A natural byproduct from the wastewater treatment process containing primarily methane gas.

Biosolids – Nutrient-rich organic material produced by treating wastewater solids.

Chlorine – an elemental gas commonly used for disinfecting drinking water and wastewater.

Combined sewer overflow – Discharge of a mixture of storm water and domestic waste when the flow capacity of a sewer system is exceeded during rainstorms.

Consumer Price Index – An index of prices used to measure the change in the cost of basic goods and services in comparison with a fixed base period. Also called cost-of-living index.

Dissolved oxygen (DO) – The oxygen freely available in water, vital to fish and other aquatic life, and for the prevention of odors. DO levels are considered a most important indicator of a water body's ability to support desirable aquatic life.

Drop box – A King County-owned and operated solid waste disposal facility. Drop box facilities normally serve the general public with loose loads and receive waste from off-site. DNRP's Solid Waste Division operates two drop box facilities: Skykomish and Cedar Falls.

E. coli bacteria – A bacillus (Escherichia coli) normally found in the human gastro-intestinal tract and existing as numerous strains, some of which are responsible for diarrheal diseases.

Enterococcus bacteria –Refers to a subgroup of the fecal streptococci that includes S. faecalis, S. faecium, S. gallinarum, and S. avium.

Fecal coliform bacteria – Bacteria found in the intestinal tracts of mammals. Their presence in water or sludge is an indicator of pollution and possible contamination by pathogens.

Floodplain – The flat or nearly flat land along a river or stream or in a tidal area that is covered by water during a flood.

Goal – Broad statements describing desired outcomes, but more specific than an agency's mission. Goals support the mission and identify specific themes or opportunities for an organization to accomplish in order to achieve its mission. Goals translate the mission of the organization into performance and help create the organization's identity.

Greenhouse gas – A gas, such as carbon dioxide or methane, which contributes to climate change.

Household Hazardous Waste – Hazardous products used and disposed of by residential, as opposed to industrial, consumers. Includes paints, stains, varnishes, solvents, pesticides, and other materials or products containing volatile chemicals that can catch fire, react or explode, or that are corrosive or toxic.

Hypochlorite – A salt or ester of hypochlorous acid; used in the wastewater treatment process.

Indicator – A measure that focuses on the condition of the environment.

Invertebrate – Animals without backbones.

Landfill gas – Gas produced by the microbial decomposition of municipal solid waste in a landfill. It is comprised of 50 to 50 percent methane, 40 to 50 percent carbon monoxide, and less than one percent hydrogen, oxygen, nitrogen, and other trace gases.

Macroinvertebrate - Animals that you can see with the naked eye that don't have backbones. Some examples include insects, crustaceans, worms, snails, and clams. Macroinvertebrates are often referred to by biologists with the colloquial term of "bugs."

Mean – The average value of a set of numbers.

Median – Relating to or constituting the middle value of an ordered set of values (or the average of the middle two in an even-numbered set).

Methane – A colorless, nonpoisonous, flammable gas created by anaerobic decomposition of organic compounds. A major component of natural gas used in the home.

Mission – Provides a summary of the organization's purpose and answers the questions, "why do we exist?" The mission provides the basis for aligning goals, core businesses and programs. The mission does not answer "how" the purpose will be achieved.

National Pollutant Discharge Elimination System (NPDES) – A provision of the federal Clean Water Act which prohibits discharge of pollutants into waters of the United States unless a special permit is issued by EPA or a state.

Nonpoint source – Diffuse pollution sources (without a single point of origin or not introduced into a receiving stream from a specific outlet). The pollutants are generally carried off the land by storm water. Common non-point sources are agriculture, forestry, construction, and city streets. Used on contrast to "point sources" which refers to any single identifiable source of pollution such as a pipe or outfall.

Normative flow – A flow regime in streams and rivers that resembles the natural flow regime sufficiently to sustain all stages of a diverse set of native species.

Outcome – A type of measure that looks at customer satisfaction with services, program results, or impact on clients or society. Also called effectiveness measures.

Outfall – The place where effluent is discharged into receiving waters.

Performance measure – A measure that is used to track the performance of a program or an organization. Performance measures can be related to inputs, processes, efficiency, or effectiveness (outcomes). See indicators.

pH – An expression of the intensity of the basic or acid condition of a liquid; may range from 0 to 14, where 0 is the most acid and 7 is neutral. Natural waters usually have a pH between 6.5 and 8.5.

Phosphorus – An essential chemical food element that can contribute to the eutrophication of lakes and other water bodies. Increased phosphorus levels result from discharge of phosphorus-containing materials into surface waters.
Riparian – Areas adjacent to rivers and streams with a high density, diversity, and productivity of plant and animal species relative to nearby uplands.

Solid waste – Non-liquid, non-soluble materials ranging from municipal garbage to industrial wastes that contain complex and sometimes hazardous substances. Solid wastes also include sewage sludge, agricultural refuse, demolition wastes, and mining residues.

Superfund – The program operated under the federal legislative authority that funds and carries out EPA solid waste emergency and long-term removal and remedial activities. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions.

Target –Targets are used to denote the degree of improvement desired or an attainable goal.

Total residual chlorine – Amount of chlorine remaining after the wastewater treatment process has taken place.

Total suspended solids – A measure of the suspended solids in wastewater, effluent, or water bodies, determined by tests for "total suspended non-filterable solids."

Transfer station – A permanent fixed supplemental collection and transportation facility, used by persons and route collection vehicles to deposit collected solid waste from off-site to a larger transfer vehicle for transport to a solid waste handling facility. Transfer stations may also include recycling facilities and compaction/balancing systems.

Trophic State Indicators – Environmental calculations that help to define the trophic state of lakes. Lakes can be divided into three trophic categories - oligotrophic, mesotrophic, and eutrophic. These categories are based on potential algae production. Characteristics used to calculate trophic state indicators include: total phosphorus concentration (necessary for algae growth); chlorophyll a concentration (a direct measure of the amount of algae present); and Secchi disc readings (an indicator of water clarity).

Vision – An organization's vision provides a picture of a preferred future that provides long-term direction, guidance and inspiration for the organization.

Water Quality Index (WQI) – A index of water quality that analyzes a defined set of water quality parameters and produces a score describing general water quality. The water quality parameters included in the WQI are temperature, dissolved oxygen (percent saturation and concentration), biochemical oxygen demand, pH, total solids, ammonia and nitrate nitrogens, total phosphorous, and fecal coliforms. WQI scores range from 10 (worst case) to 100 (ideal water quality).

Water Quality Standards – State-adopted and EPA-approved ambient standards for water bodies. The standards prescribe the use of the water body and establish the water quality criteria that must be met to protect designated uses.

Water Resource Inventory Areas (WRIA) – A way to organize Washington State's watershed basins as created under the Washington State's Watershed Planning Act (RCW 90.82). The Department of Ecology and other state resource agencies frequently use the WRIAs to refer to the state's 62 major watershed basins. King County includes, in whole or in part, four WRIAs: 7, 8, 9, and 10.

Watershed – The land area that drains water to a particular stream, river, lake, estuary, or coastal zone. It is a land feature that can be identified by tracing a line along the highest elevations between two areas on a map, often a ridge. Large watersheds, like the Mississippi River basin contain thousands of smaller watersheds.

Note:
Many of these definitions come from U.S. EPA's Terms of Environment (*www.epa.gov/OCEPAterms/*) and King County's Performance Measurement Website (*http://apps01.metrokc.gov/www/exec/perform/index.cfm*).

APPENDIX A

2004 DNRP FINANCIALS

The following budget tables are from *Environmental Stewardship In King County: Department of Natural Resources and Parks Annual Report 2003.*

PARKS AND RECREATION DIVISION 2004 ADOPTED BUDGET

Regional Parks, Pools and Recreation Section	Resource Section	Capital and Land Management Section[1]	Director's Office and Administrative Services
• Aquatics • Fair and Fairgrounds • King County Aquatics Center • Marymoor Regional Park • Recreation/Scheduling and Community Centers • Greenhouse Program	• Maintenance Districts • Facilities and Grounds • Natural Resources Program • Utility and Mow Crews	• Capital Improvement Program Management • Youth Sports Facility Grant Management • ADOPS Management • Small Contracts (CIP)	• Director's Office • Finance/Budget • Revenue Collection/Accounting • WAN/LAN/PC IS Support • Audits

2004 BUDGET SUMMARY

2004 Total Operating Revenue	$20,060,671
Current Expense (CX)	$2,961,640
Use Fees	$5,078,203
Parks Levy	$11,533,243
Youth Sports Facilities Grant (YSFG)	$654,451
Real Estate Excise Tax (REET/CIP)	$1,204,342
Interest Income	$19,442
2004 Total Operating Expenditures	$20,060,671
2004 Debt Service[2]	$3,128,287
2004 Fund Balance	$1,390,650
2004 Total Revenues	$24,579,608

Notes:

[1] Operating portion only. This is a primarily capital-related section.

[2] Debt service is used to pay for major capital projects.

SOLID WASTE DIVISION 2004 OPERATING BUDGET

Transfer Station Operations	Transportation Operations	Landfill Operations	Maintenance Operations	Operations Administration	Debt Service	Capital Facilities[3]	Recycling and Environmental Services	Administration and Finance
• Operate transfer facilities • Collect fees • Monitor waste • Equip. replace-ment transfers	• Transport garbage to landfill • Haul leachate and maintenance material • Equip. replace-ment transfers	• Operate and maintain active and closed landfills • Landfill and equip. replace- ment transfers	• Maintain facilities and equipment • Procure and control inventory	• Maintenance planning for operations functions		• Plan and execute capital projects • Environmental monitoring • Operations support	• Education • Technical and financial assistance • Collection services • WSU Cooperative	• Manage fiscal functions • Administer customer service • Personnel functions • Payroll • Communications
Budget $8,827,376	**Budget** $5,469,782	**Budget** $30,720,018	**Budget** $7,068,178	**Budget** $1,328,691	**Budget** $6,598,552	**Budget** $8,790,759	**Budget** $10,625,901	**Budget** $13,512,186
Revenue Disposal fees $8,611,376 Misc. lease revenue $120,000 Sale of self-haul recycled materials $96,000	**Revenue** Disposal fees $5,469,782	**Revenue** Disposal fees $20,484,075 Fund balance $9,281,609 Interest $954,334	**Revenue** Disposal fees $7,004,078 Grants $64,100	**Revenue** Disposal fees $1,328,691	**Revenue** Disposal fees $6,598,552	**Revenue** Disposal fees $8,110,759 Constr.,demo and land clearing fees[1] $680,000	**Revenue** Disposal fees $6,124,901 Haz. Waste surcharge $3,426,000 Uninc. household fees $255,000 Grants and contributions $820,000	**Revenue** Disposal fees $12,863,036 Interest $350,000 Misc. lease revenue $264,000 Misc. other $35,150

2004 BUDGET SUMMARY

2004 Total Operating Revenues	$83,659,834
2004 Fund Balance Used	$9,281,609
2004 Debt Service[4]	$6,598,552
2004 Total Operating Expenditures	$99,539,995

Notes:

[1] Supports Construction, Demolition and Landclearing Program costs in Engineering Section.

[2] Reserves required by statute and code.

[3] Operating portion only of capital facilities budget. Does not include debt-financed design/construction costs.

[4] Debt service is used to pay for major capital projects.

DESIGNATIONS and RESERVES

(estimated fund balance on 12/31/04)

Landfill Reserve Fund[2]	$27,488,000
Landfill Post-closure Maintenance Fund[2]	$24,545,000
Capital Equipment Replacement Fund	$9,455,000
Environmental Reserve Fund	$1,253,000
Operating Fund	$16,750,000
Construction Fund	$15,424,000

WATER AND LAND RESOURCES DIVISION 2004 OPERATING BUDGET

	Manager, Finance and Administration[1][2]	Strategic Inititiatives	Office of Rural and Resource Programs	Land and Water Stewardship	Science, Monitoring and Data Management	Stormwater Services	Flood Hazard Reduction	Capital Projects and Open Space Acquisitions[3]
	• Division Mgmt. • Finance/Budget • Accounting/Payroll • Customer Accounts • LAN/PC Support • Office Support • Human Resources • Rate Development	• RDP Implementation • Policy and Performance • Adaptive Mgmt. • Intergovernmental • Watershed ILA • Visual Comm./Web • Perform. Measures	• Noxious Weeds • Forestry • Agriculture • Incentives • Natural Lands Mgmt.	• Hazardous Waste • Community Outreach • Grants • Groundwater Management • Watershed Support • Lakes Stewardship	• Environmental Lab • Data Mgmt. • Monitoring Assessment • Analysis	• Facility Maintenance • Drainage Investigation • Regs and Compliance • NPDES Permit	• River Facility Maintenance • River Mgmt Program • Green River Program	• Acquisitions • Ecological Services • SWM Engineering • Project Coordination/ Tracking
Budget:	$8,954,097	$3,531,785	$3,330,474	$6,873,999	$11,097,631	$10,928,533	$4,502,932	$326,324
SWM Fee	$4,351,972	$930,772	$766,422	$710,341	$422,601	$7,036,206		$288,103
SWM Fund Balance	$260,924	$55,805	$45,951	$42,589	$25,337	$358,587		$17,273
Rural Drainage Fee and RDP Fund Balance	$216,173	$196,825	$587,803	$578,388	$511,245	$2,387,414		
RIF Fund Balance							$534,066	
Local Hazardous Waste	$383,014			$3,559,168				
WTD Operating	$2,677,644	$182,648	$16,750	$1,774,275	$8,959,925			
WTD Capital	$295,134	$87,972			$602,914			
River Improvement Fund & Intercounty RIF							$2,433,322	
Noxious Weed Program			$948,000					
Grants/Service Charges/ILA's/Other[4]	$769,236	$2,077,763	$965,548	$209,238	$575,609	$1,146,326	$1,535,544	$20,948
TOTALS	$8,954,097	$3,531,785	$3,330,474	$6,873,999	$11,097,631	$10,928,533	$4,502,932	$326,324

Revenue

2004 BUDGET SUMMARY

2004 Revenues

Fund Balance (SWM/RDP/RIF)	$1,738,380	Noxious Weed Fees	$948,000
SWM Charges	$14,506,417	River Improvement Fund Levy	$2,433,322
Rural Drainage Fees	$4,080,000	Grants/Interagency Services	$4,481,782
Local Hazardous Waste Fees	$3,942,182	King Conservation District (KCD) Fees	$669,434
Wastewater Charges[5]	$14,597,262	ILA/Cities Services	$2,148,996

2004 Total Revenues	$49,545,775
2004 Total Operating Expenditures	$49,545,775

Notes:

(1) Revenues in Finance and Administration are shares of WLR overhead and indirect costs.

(2) 2004 increase due to one-time class/comp legal settlement of $659,919.

(3) CPOSA labor charged directly to capital projects. Residual budget is non-billable costs.

(4) Includes grants, interagency services charges, ILA and service charges to cities, and KCD.

(5) Includes an operating transfer from the Wastewater Treatment Division of $13,611,242 and a capital transfer of $986,020.

DESIGNATIONS and RESERVES

Estimated Fund Balance as adopted on 12/31/04 for all WLR Funds: $1,416,286

WASTEWATER TREATMENT DIVISION 2004 OPERATING BUDGET

Debt Service	Manager	Finance and Administration	East Operations	West Operations	Planning and Compliance	Asset Management	Major CIP	Central and Other Charges
	• Management • Safety & Training • Special Projects	• Human Resources • Information Systems • Technical Publications • Finance • Capacity Charge Accounts Receivable	• Shift Crews • Buildings and Grounds • Offsite Operations • Process Control • Coordination • Electrical and Mechanical	• Shift Crews • Buildings and Grounds • Offsite Operations • Process Control • Coordination • Electrical and Mechanical	• Water reuse • Biosolids • Energy Recovery • Environmental Compliance • Planning and Community Relations • CSO, I & I • Industrial Waste	• Construction Management • Inspections and Scheduling • Engineering • Program Implementation	• Program Management • Treatment • Conveyance • Permitting and Right of Way • Project Controls	• Emergency Contingency • Central Charges and Overhead • Direct Program Transfers
Budget $110,082,000	**Budget** $2,875,253	**Budget** $3,854,409	**Budget** $19,903,503	**Budget** $21,828,154	**Budget** $7,972,303	**Budget**[1] $2,230,418	**Budget**[1] $69,254	**Budget**[4] $25,906,708
Revenue Sewer Rates $90,793,000 Interest $4,828,000 Capacity Charge $14,461,000	**Revenue** Sewer Rates $2,875,253	**Revenue** Sewer Rates $3,854,409	**Revenue** Sewer Rates $17,388,683 Industrial Flow Charges $919,307 Septage $1,595,513	**Revenue** Sewer Rates $20,908,847 Industrial Flow Charges $919,307	**Revenue** Sewer Rates $6,249,646 Industrial Flow Charges $1,722,657	**Revenue** Sewer Rates $2,230,418	**Revenue** Sewer Rates $69,254	**Revenue** Sewer Rates $25,906,708 Xfer to Reserves and CIP[3] $23,655,000

2004 BUDGET SUMMARY

2004 Total Operating Expenditure.....$84,640,000
2004 Debt Service[5] $110,082,000
Transfers to Reserves and CIP..... $23,655,000

2004 Total Operating Revenues.....$218,377,000

Notes:

(1) Operating portion only of these primarily capital-related sections.

(2) Financial policy target is 15% of prior year's operating expenditures (about $12 million).

(3) Not included in WTD operating budget. Shown only to balance revenue use to total operating revenues. Per bond covenant, all excess operating revenues must be used for CIP the following year.

(4) Includes an operating transfer to Water and Land Resources Division (WLRD) of $13,611,242. A separate capital transfer to WLRD of $986,020 is not shown here. WTD's toal transfer to WLRD is $14,597,262.

(5) Debt service is used to pay for major capital projects.

DESIGNATIONS and RESERVES

Bond and State Revolving Fund.....$80,964,000
Undesignated Fund Balance[2]..... $12,613,000
Policy Reserves..... $9,900,000
Operating Liquidity Reserve..... $7,696,000