

Building a Water Smart Washington

December 3, 2010



WASHINGTON STATE

Department of Ecology

Water Resources Reform Legislation (ESSSB 6267)

Engrossed Second Substitute Senate Bill (ESSSB) 6267, Sec. 2 states:

Sufficient resources to support the department of ecology's water resource program are essential for effective and sustainable water management that provides certainty to processed applications. The department of ecology shall review current water resource functions and fee structures, and report to the legislature and the governor by September 1, 2010, on improvements to make the program more self-sustaining and efficient.



Ecology Report to the Legislature

Ecology has prepared and submitted a report to the Legislature to present options and recommendations for reform of water resources activities and funding mechanisms



Water Resources 10 Program Activities Detailed in 6267 Report

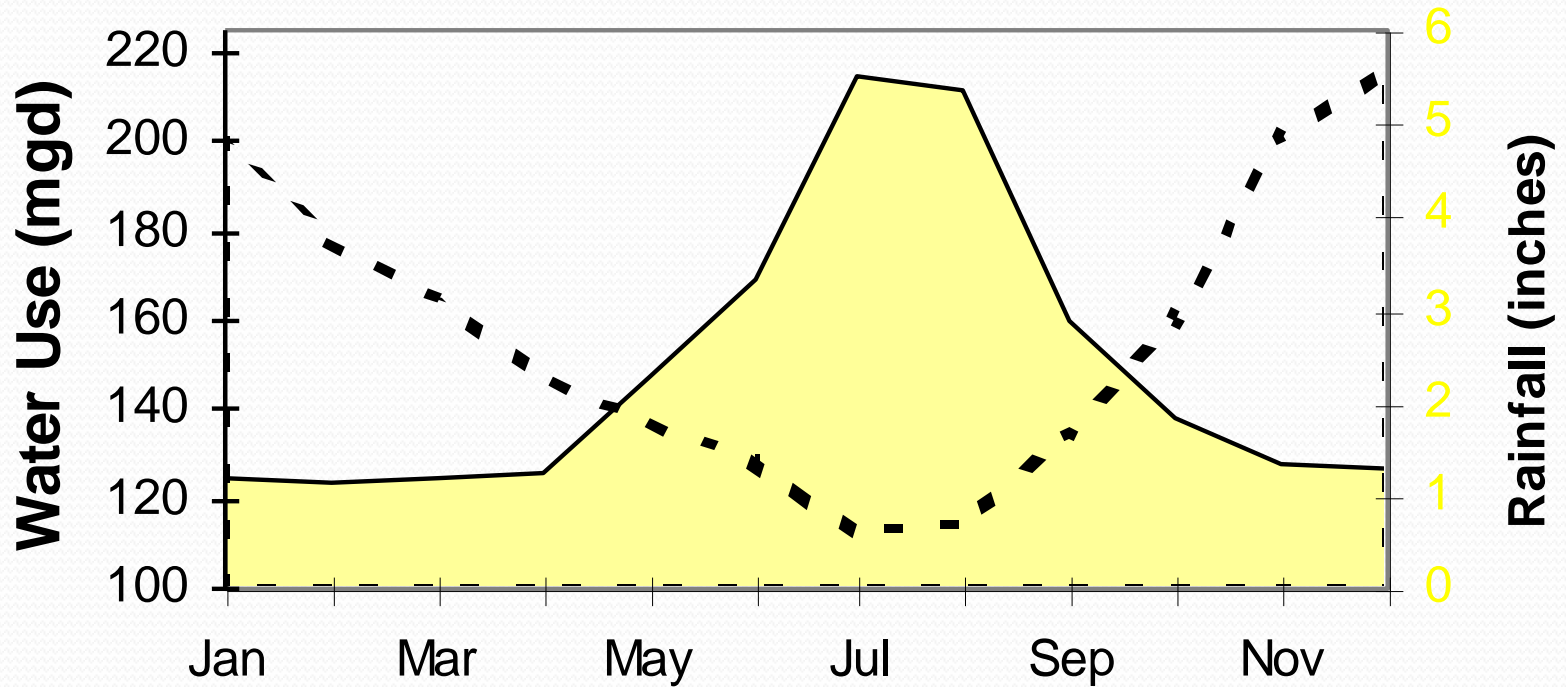
- Clarify Water Rights
- Assess, Set and Enhance Instream Flows
- Ensure Dam Safety
- Manage Water Rights
- Prepare and Respond to Drought
- Promote Compliance with Water Laws
- Provide Water Resources Data and Information
- Regulate Well Construction
- Watershed Management
- Support Water Use Efficiency

Water is Key to Our Quality of Life



But we are facing many serious water challenges that threaten our quality of life now, and will for generations – **unless we act now.**

The Summer Crunch



Water Management Challenges:

We've Got Big Problems Today -- and Without Action, Things Will Get Worse

Today's Challenges

1. Lack of water for economic growth -- job creation and housing
2. Streams and rivers without sufficient water year-round for fish and wildlife
3. Groundwater levels sharply declining in many areas of the state
4. An outdated legal system, written to address the world of a different century
5. Unstable and insufficient funding for water management

Emerging Challenges

1. Increasing demands for water from population growth
 2. Higher frequency of water shortages predicted due to climate change
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Today's Challenges –

Lack of Water for Economic Growth

- Water provides “fuel” to our state’s economic engine
- There is an increasing demand for water in our state to support economic activity, yet in many areas of the state supplies are limited
- An efficient and effective water management program is critical to supporting economic growth while protecting senior water rights and the environment

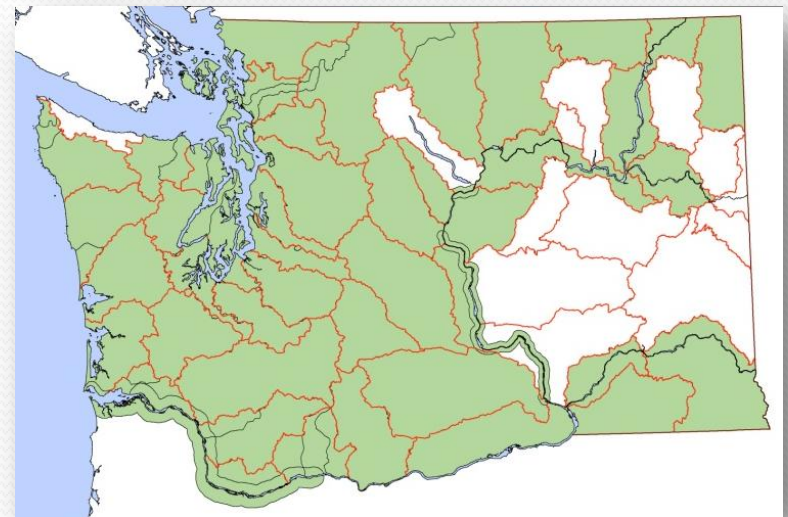


Today's Challenges –

Insufficient Water for Fish & Wildlife



- In nearly every watershed in the state, salmon and trout species are in serious decline and listed under the federal Endangered Species Act
- Water is essential for fish migration, spawning, and rearing
- The state has committed millions of dollars to recover these populations
- Flows need to be protected and restored to avoid extinction of salmon and trout populations

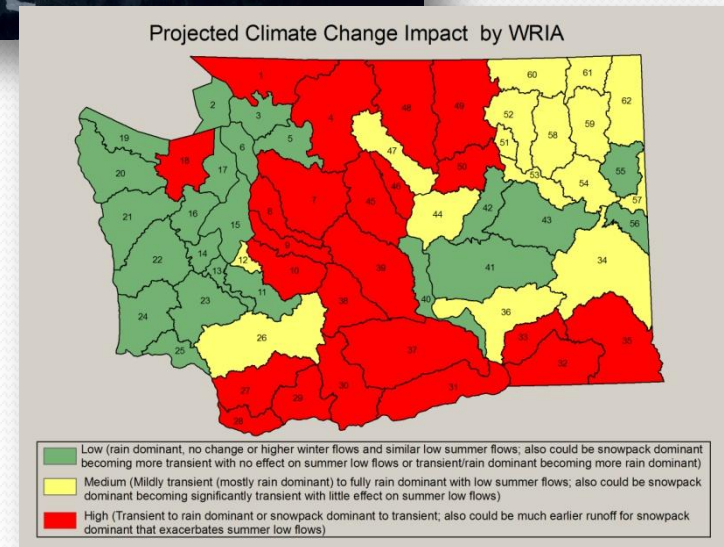


Watersheds with one or more threatened or endangered fish species

Emerging Challenges –

Providing Enough Water in a Climate Change World

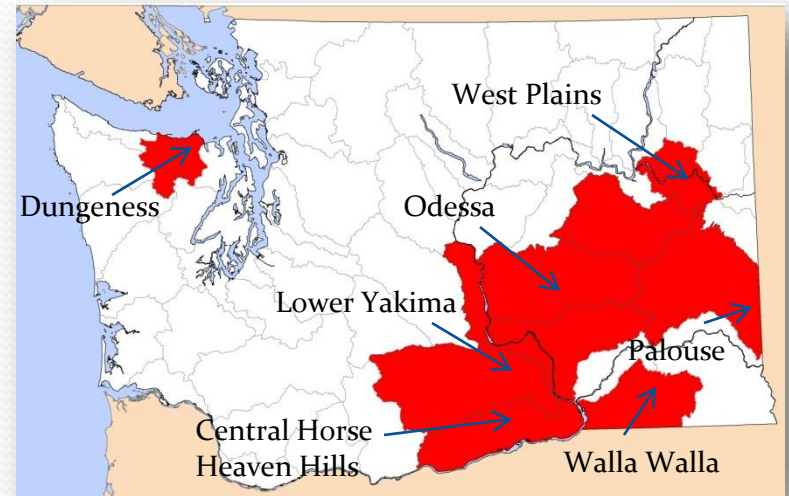
- Climate change will dramatically reduce our current water availability in many areas of the state
- Adverse effects include:
 - Loss of snowpack
 - Reduced summer streamflows
 - Higher stream temperatures
 - Higher winter flows
- Irrigated agriculture is especially vulnerable, e.g. water shortages in the Yakima Basin are expected to occur twice as frequently



Today's Challenges –

Sharply Declining Groundwater Levels

- Groundwater plays a critical role in Washington's economic and environmental future:
 - Source of *drinking water* for more than 60 percent of Washington residents
 - *Irrigates* just over 400,000 acres in our state, supporting thousands of agricultural jobs and a large part of the state's economy
 - Primary source of water for hundreds of *commercial and industrial needs* -- 237 million gallons per day for livestock, aquaculture, industrial and mining uses combined
 - Expected to *provide the majority of drinking water for the millions of new residents* predicted for Washington in the next several decades
- We are using groundwater faster than it is naturally replenished
- For example, groundwater levels of the Columbia Plateau system show marked declines in the past 25 years in more than 80% of nearly 500 wells measured



 Watersheds with significant groundwater declines

Today's Challenges –

An Outdated Legal System

- The Water Code dates to 1917 and was designed to facilitate settlement
- Update current laws to better support water management. For example, extend the period of non-use for water rights under the “use it or lose it” relinquishment law which currently discourages water conservation
- Use of many water management tools are limited; more flexibility in use of mitigation, for example, will help allow new water uses while protecting water supplies



Modern day Seattle



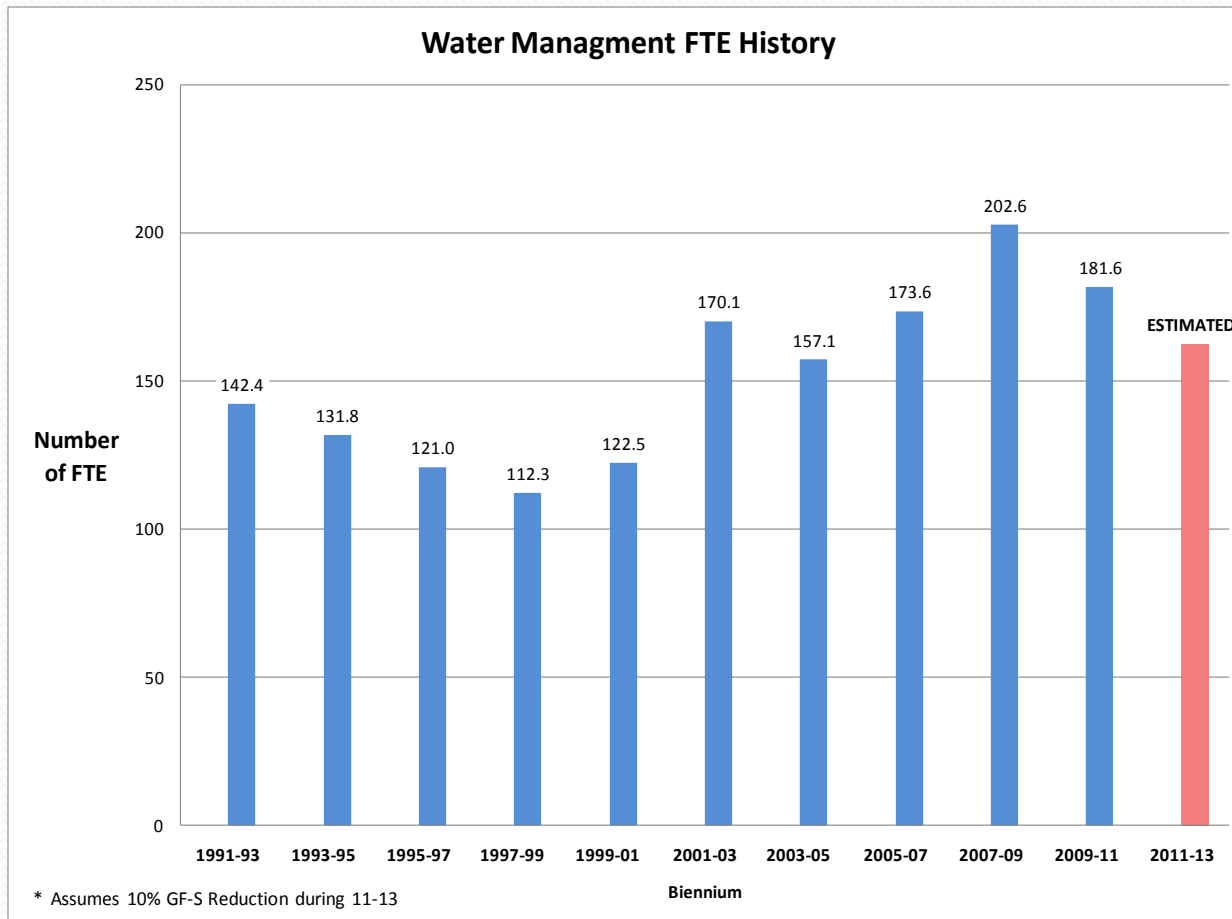
Today's Challenges –

Unstable and Insufficient Funding for Water Management

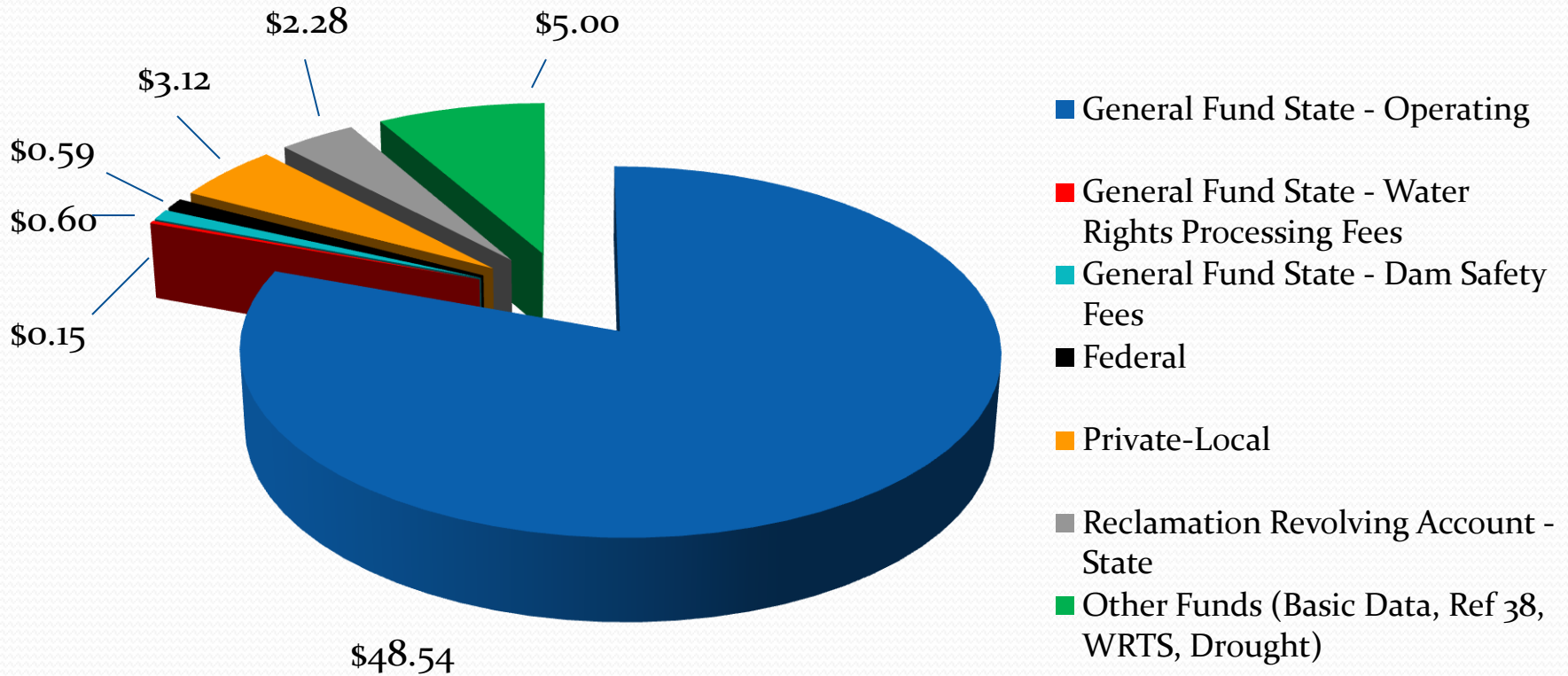
- Water resource management is highly dependent upon state general fund dollars, a diminishing pool with many competing demands on it
- Since 2007, the biennial budget for water management has been reduced about \$5 million and 20 staff positions
- Under-funded water programs will leave us unprepared to prevent future water conflicts and meet all of our state's water needs



Water Management Staffing / 1991 to Present



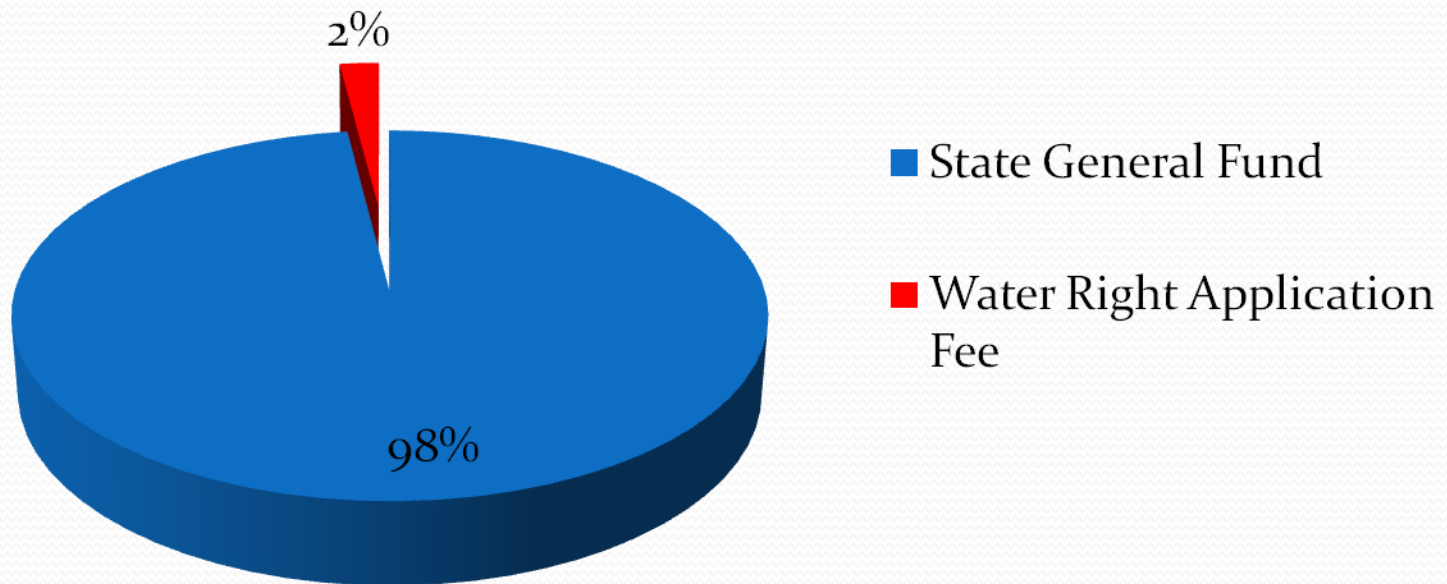
Current Water Management Operating Budget



Dollars in millions

Water Right Processing Costs

Percent Support

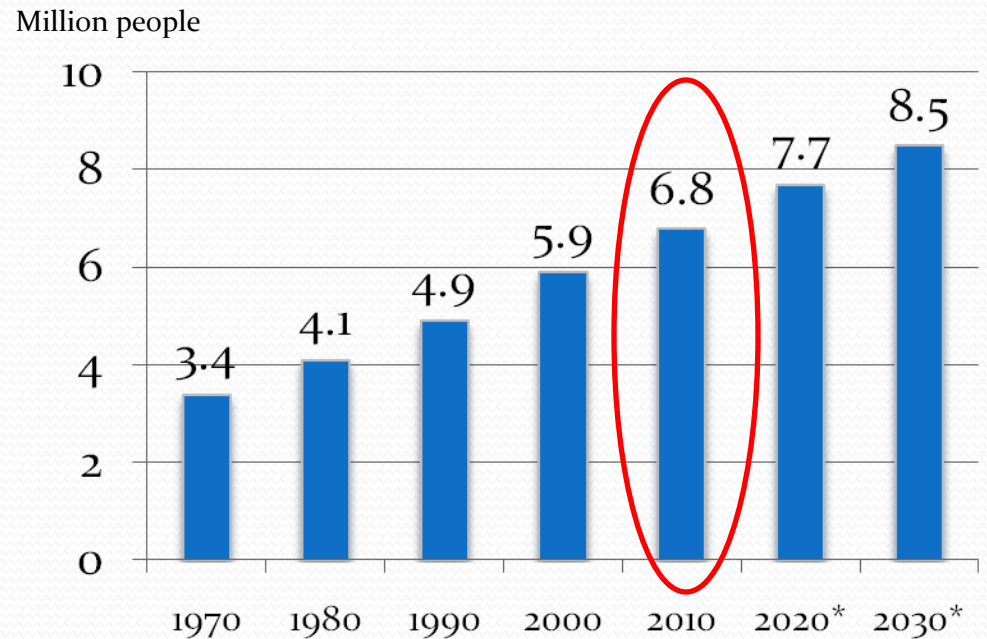


Emerging Challenges –

Increasing Demands for Water from Population Growth

- Projected population growth of 1.7 million people within the next 20 years - equivalent to 3 cities the size of Seattle
- Finding water to meet this growth will be very challenging
- Some of this growth will occur in rural areas that lack water supply

Population Growth in Washington State

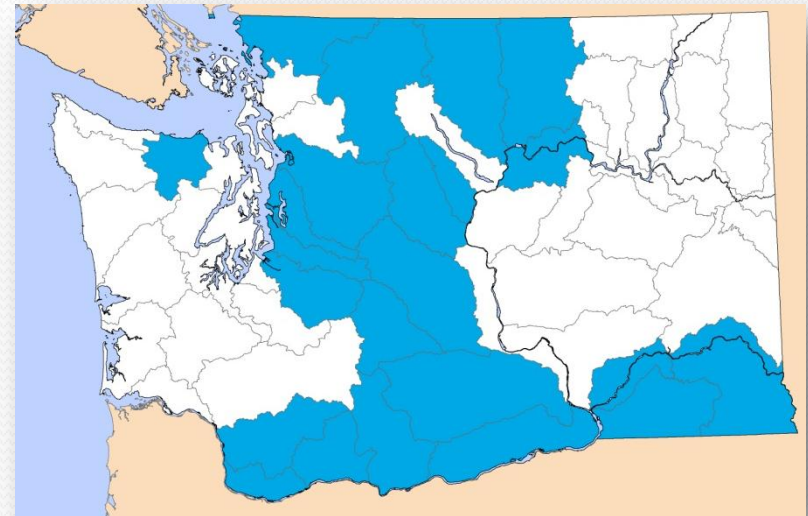


* Based upon Office of Financial Management estimates

Emerging Challenges –

Higher Frequency of Water Shortages Due to Climate Change

- Climate change will dramatically reduce our current water availability in many areas of the state
- Adverse effects include:
 - Loss of snowpack
 - Reduced summer streamflows
 - Higher stream temperatures
 - Higher winter flows/flooding
- Irrigated agriculture is especially vulnerable, e.g. water shortages in the Yakima Basin are expected to occur twice as frequently



 Projected “High Impact” to watersheds due to climate change

Meeting the Challenges:

Ecology is Proposing *Active Water Management* to Meet Current and Emerging Challenges

- This means a proactive approach to water supply solutions, rather than reacting only to individual permit applications or emergent problems. Actively managing water includes:
 - Making sure we are using current water supplies efficiently
 - Knowing how much water is being used and what is available for new uses
 - Investing in new water supplies where needed
 - Continuing to work with local partnerships – managing water with the people who know their watersheds and who have invested many years in getting plans in place

Meeting the Challenges --

Active Water Management

- With an active water management approach:
 - Water needs for people and ecosystems are anticipated
 - We would have technically sound data and analysis about where it will be difficult to meet water needs
 - We would find solutions before availability becomes critical
 - Land use and water availability would be closely linked

Key Reforms for Active Water Management

1. Reforming the water permitting process
2. Updating the Water Code
3. Creating stable funding for water management

Meeting the Challenges –

Reforming the Permit Process

- Improving the water rights permit process includes the following:
 - Requiring better information on permit applications to enable timely decisions
 - Using the private sector to help with some tasks
 - Getting water information to people, governments, and water professionals through the internet so that they can make more informed decisions
 - Identifying inefficiencies and implementing reforms

Meeting the Challenges –

Updating The Water Code

- Reform mitigation provisions to allow us to be clear up front about what would suffice to get to a permit or change approved. Currently law says we cannot require it – only the applicant can propose it - inefficient process.
- Stretching water supplies: dimmer switch for permit exempt wells would allow lower limits on quantity and acreage by rule in water short areas. In response to the 2009 AG opinion requested by Kittitas County - discussed earlier today.
- Reviewing existing water rights: allow Ecology to tentatively determine the extent and validity of water rights that are in conflict and solve conflicts without a general adjudication (to overcome restrictions imposed by the state Supreme Court in the 1993 Rettkowski case). Limited “look-back” period for Ecology and the PCHB (but not a future adjudication) to 30 years.

Meeting the Challenges –

Updating the Water Code (cont.)

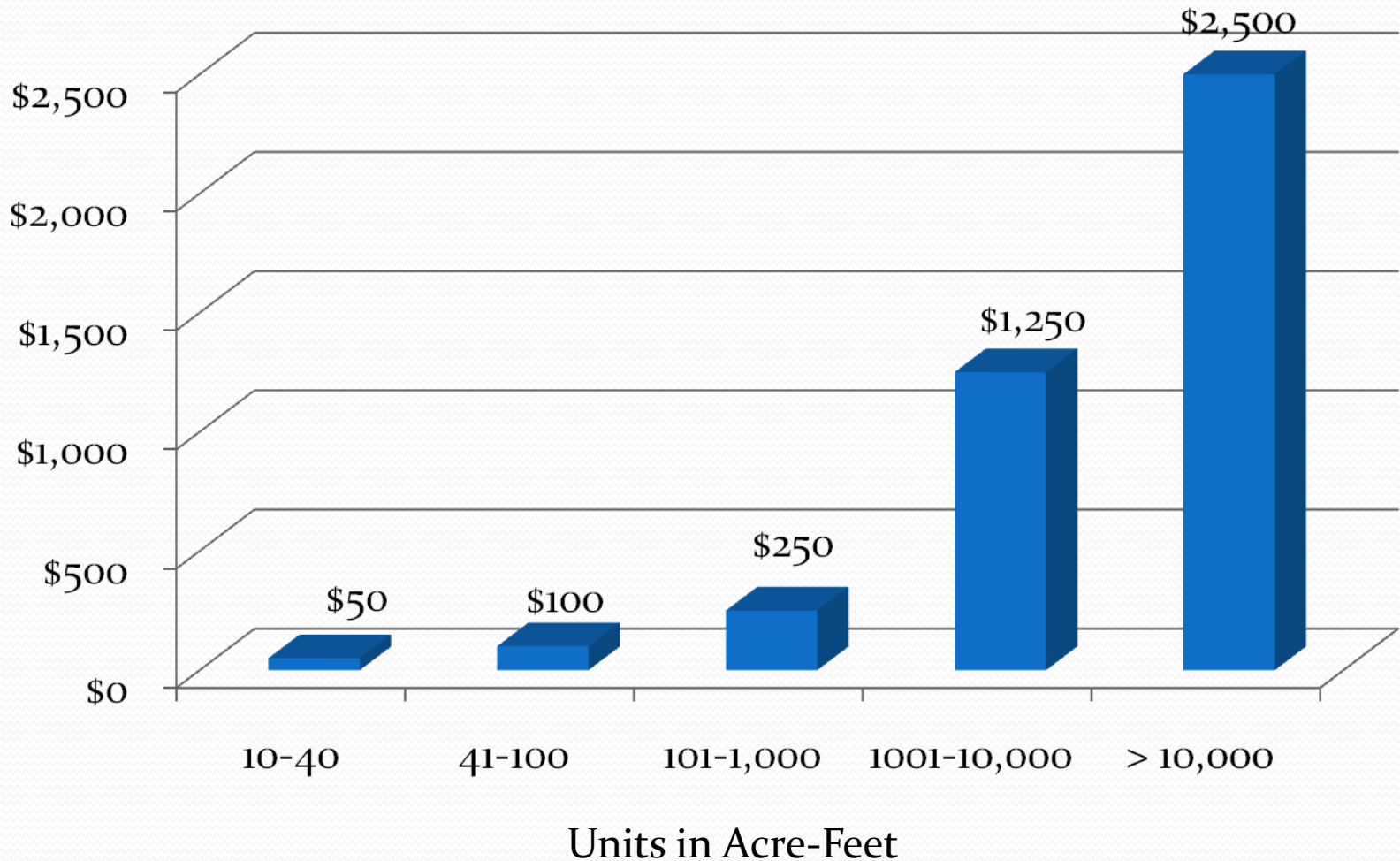
- Revising the “use it or lose it” relinquishment law. Extend the period of non-use to ten years (currently five). Reform partial relinquishment for agriculture to encourage water conservation by irrigators.
- Establishing water budgets and compiling sound scientific data on water availability. Map all water rights, long term supply and demand forecasts. Put all water rights and other water data on the internet to promote self-service.
- Continue managing water on a watershed basis in partnership with tribes and local governments and stakeholders. Continue supporting implementation of watershed plans to protect and harvest the results of over ten years of state and local investments.

Meeting the Challenges –

Creating a Stable Funding Base

- Stable and sufficient funding is critical to having an effective water management program
- Adopt the “beneficiary pays” principle, so those who receive the benefit from the services paying equitably for the services they receive
- Ecology is recommending two types of fees to help create a stable funding base:
 - **Water Management Services Fee** – new annual fees for water right holders, to cover a portion of the costs to manage water resources
 - **Water Rights Processing Fee** – fees related to the processing of individual water right applications. Applicants would assume the full cost of having their application processed
- With less dependence on the state general fund, monies would be freed up for other essential state services

Water Management Fee Structure



It's Time for a New Approach to Help Ensure a Water Smart Washington

- Washington faces serious challenges in meeting competing demands for water, with consequences to our communities, economy and natural environment
- There will be even more pressures in the future from population growth, economic expansion and the impacts of climate change
- An active water management approach to water is needed now to meet these challenges

Proposed Legislation and Budget Package

- Ecology has submitted a proposed legislative bill and related budget proposal to the Office of Financial Management that would implement the recommendations of the 6267 report.
- The bill is posted on our internet site and we continue to solicit and receive comments on it that we will provide to decision-makers.
- <http://www.ecy.wa.gov/programs/wr/wrhome.html>

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Yakima River



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