

A photograph of a waterfall cascading over dark, mossy rocks into a pool of water. The water is a vibrant blue-green color, and the scene is captured with a long exposure, giving it a soft, ethereal quality.

Before the well runs dry:

Water solutions for  
Washington





## INTRODUCTION

**I**t flows from the tap to quench our thirst. It makes our crops grow. It nourishes fish and wildlife. It is clean water, the lifeblood of Washington State, and we can't live without it.

Rivers and streams supply the water that is so important to the health of our families, communities and economies. Rivers, like the Dungeness, Skagit, Stillaguamish, Wenatchee, Walla Walla, Spokane and Columbia are some of the true crown jewels of our natural heritage.

Clean, flowing rivers and streams have become synonymous with our special corner of the country — our Northwest way of life. They are home to fish and wildlife including salmon, a Northwest icon, and steelhead, Washington's state fish.

Historically, we have been able to rely on seasonal rains to fill our rivers and lakes, and on mountain snowpack to feed rivers through the dry summer months. But times are changing. Today, more and more rivers are over-tapped. Some are literally sucked dry. In our rush to build and expand, we forgot that rivers need water; that our water supply

### *New water supply challenges: Global warming and population growth*

Warmer temperatures will dramatically alter water supplies by decreasing natural water storage provided by winter snowpack. This means less water will be available during the dry summer months to meet the needs of people, farms, fish and wildlife.

Rapid population growth is increasing the demands for water in both urban and rural areas. Washington's population has doubled over the past 50 years and our current population of 6.5 million is expected to increase by nearly two million by the year 2030. In the Puget Sound region alone, the population is projected to increase by over one million people in the next 20 years.

is, in fact, limited.

This scarcity is creating uncertainty, threatening livelihoods and some communities.

If we don't improve the way we manage Washington's water, we will face serious consequences. Two major



Roughly **two-thirds** of the state's watersheds lack instream flow protections.

Washingtonians use approximately **5.2 billion** gallons of water per day.

Washington's population is projected to add another **2 million** residents by 2030.

Groundwater contributions to stream flows in Washington average **86 percent** in July and August.





forces, global warming and population growth, are adding unprecedented urgency to the need for better water management.

Most of Washington’s water laws are a century old, created when our state had a fraction of today’s population. We need water policies and management that address today’s challenges. We must act now so our communities and future generations can enjoy water security and healthy rivers.



“Rivers like the Dungeness are vitally important to the environment, economy, and quality of life in Clallam County. We need everyone to use water more efficiently, making sure we manage our water resources in a sustainable way. It is vital that we protect and enhance our rivers and streams in order to safeguard our health and the health of all the diversity of life that depends on cool, clean water.”

— Steve Tharinger, Clallam County Commissioner

Fortunately, we have the opportunity to make the changes necessary for a thriving and sustainable water future.

### WATER: A PRECIOUS RESOURCE

**W**ater is a limited and publicly owned resource which is asked to meet many demands — for drinking water, municipalities, industries, and agriculture.

It is also essential to the health of Washington’s rivers and streams, which are central to our quality of life and vitally important to our economy. Recreational fishing contributes at least \$850 million annually to Washington’s economy. Wildlife viewing,



Large areas of the state receive only **5 to 8 inches** of precipitation per year.

In 2001, there were anywhere from **500,000 to 750,000** permit-exempt wells in Washington. The vast majority are not metered for water use.

About **7,000** new permit-exempt wells are drilled each year.

Snowpack in the Cascades has declined by as much as **60 percent** in some places.



including activities like Issaquah Salmon Days and the Skagit Bald Eagle Festival, contributes at least \$1.3 billion.

Beyond the habitat, fishing and recreation values, healthy rivers also provide an impressive array of services, including drinking water supply, water storage during floods, and a steady supply of water during the summer and early fall when rainfall is scarce. Additionally, having enough water in our rivers and streams dilutes pollution that threatens the health of people and wildlife. Healthy streams can also enhance property values.



## WHAT'S BROKEN

Our state's existing water policy and management is sorely out of date. As it stands now, we are ill-equipped to manage water in a sustainable way that meets the needs of farms, cit-

ies and industries as well as the needs of rivers and the people, fish and wildlife that depend on them.

The shortcomings in our current policies and management include:

### Lack of basic information

We withdraw billions of gallons of water every day from rivers, streams and aquifers across the state, yet we are missing essential information about exactly how much water is withdrawn and when. Similarly, we don't know the validity of most claimed water rights, and some have existed only on paper since Washington first became a state. We also do not adequately monitor aquifer water levels, despite the fact that most of our drinking water comes from underground sources.

### Lack of essential environmental protections

Roughly two-thirds of the rivers and streams in the state lack protections to ensure they have adequate flows of water. For those rivers and streams that do have recognized "minimum instream



During the drought of 2001, **hundreds of thousands** of juvenile salmon were stranded by low flows in the Columbia River and were unable to travel to the Pacific Ocean.

Washington has experienced **two** severe droughts over the past **eight** years.

Washington is home to **14** salmon and steelhead stocks listed under the Endangered Species Act.

Roughly **1.8 million** acres of land in Washington are irrigated.



Just a trickle of water flows in Peshastin Creek (above). Our outdated policies make it difficult to meet the needs of growing communities, agriculture and river health in a sustainable way.



flows,” many of the protections are outdated and do not include any mechanisms to get water back into dry reaches.

**Lack of accountability**

Washington suffers from wasteful and illegal water use that harms both the environment and other water users.

Due to political pressures and a lack of funding, there is little to no enforcement against water users who waste water or exceed their permit conditions, and there has even been resistance to stopping large water users who lack any permit at all. To make matters worse, a statutory loophole allows developers and others to drill thousands of new groundwater wells each year, without securing standard water use permits. As a result, new homes are built without any consideration of whether water is legally available for residents, and whether the permit-exempt wells will harm existing water right holders or the environment.

**If we don’t fix these broken policies, we face a fairly bleak future that looks something like this:**

- Rights under attack: farmers and others with senior water rights will have their rights impaired due to

“Roslyn, founded in 1886, faces water shut-off in drought years while surrounded by new development. Does this make sense?”

Roslyn has a front seat for the train wreck between public health and safety and Washington water code. Irresponsible land use decisions by County government without considering impairment of senior water rights is threatening our water supply.

The rapid conversion of former agriculture and forest lands into low-density sprawl development with no real environmental review or water rights puts our future at risk. This rampant development fed by permit exempt wells is creating an unsustainable boom for developers while senior water users face shut-offs.

No agency of government seems willing to face the fact that you can’t have unlimited growth on a limited water supply. The state can’t continue to allow unlimited exempt wells. It puts the water supply needs of people in conflict with the needs of agriculture and the needs for instream flows for fish and wildlife.”

— Joe Peck, water superintendent, Roslyn

There are **1,015** dams in Washington.

Sportfishing contributes **\$850 million** annually to Washington’s economy.



the proliferation of permit-exempt wells and on-going illegal water use.

- Polluted water: excessive water withdrawals will reduce river and stream flow, particularly during the summer and early fall, and concentrate pollution, posing risks to people and wildlife.
- Lost investments in salmon recovery: the billions spent to recover salmon and steelhead will not pay off as hoped in Puget Sound and other basins because rivers and streams will be too degraded.



- Poorly planned development: farmland, forests, floodplains, and wetlands will be steadily lost to sprawl in rural areas because growth will not be reasonably limited to the available water supply.

The bottom line: if we fail to reform our outdated water policies, we will see serious economic and environmental impacts in communities across the state.



### SOLUTIONS WITHIN REACH

**I**t boils down to fairness and the legacy we wish to leave for future generations. We all need clean water in our rivers, streams and aquifers. Our outdated water policies put the interests of all Washington residents at risk. These policies must be reformed if we are to secure a fair water future for all. Solutions include:

- Requiring the collection and reporting of basic information essential to smart water management
- Securing adequate flow protections to support healthy rivers and streams
- Closing loopholes that allow unsustainable water use and infringement of water rights

Per capita domestic water use in western Washington counties ranges from **72 gallons** per day (Island) to **125 gallons** per day (Mason).

Per capita domestic water use in eastern Washington counties ranges from **96 gallons** per day (Yakima) to **210 gallons** per day (Spokane).

A majority of Washingtonians rely on groundwater for their drinking water, yet the state does not comprehensively monitor the quantity or quality of the water in its aquifers.

The Department of Ecology took **22** enforcement actions against illegal water use in 2006, fining violators a total of **\$2,100**.



- Requiring and promoting efficient water use
- Promoting natural stormwater management
- Requiring development to be consistent with a sustainable water supply
- Preventing illegal water use

If we can achieve these reforms, Washington’s citizens will enjoy a sustainable water future that includes secure water rights, thriving communities, and healthy rivers and streams.

Washington’s water crisis is real, but commonsense solutions are within reach. If we want a sustainable future for our state, then the time for action is now.



The long-term well-being of farms (like this Walla Walla farm at far left), salmon runs, and our clean water supply requires changes to our state’s outdated water policies.

“When I began my career as a fisheries biologist back in the 1970’s, I heard the old timers talk about the good old days – abundant fish and shellfish, clean streams and rivers, and plenty of water for everyone. I never imagined that 30 years later, even the 1970’s look darn good. Since then we have seen a continued decline in the health of our streams, rivers, and Puget Sound. Fisheries resources continue to decline, and competition between clean water for human consumption and for natural systems grows.

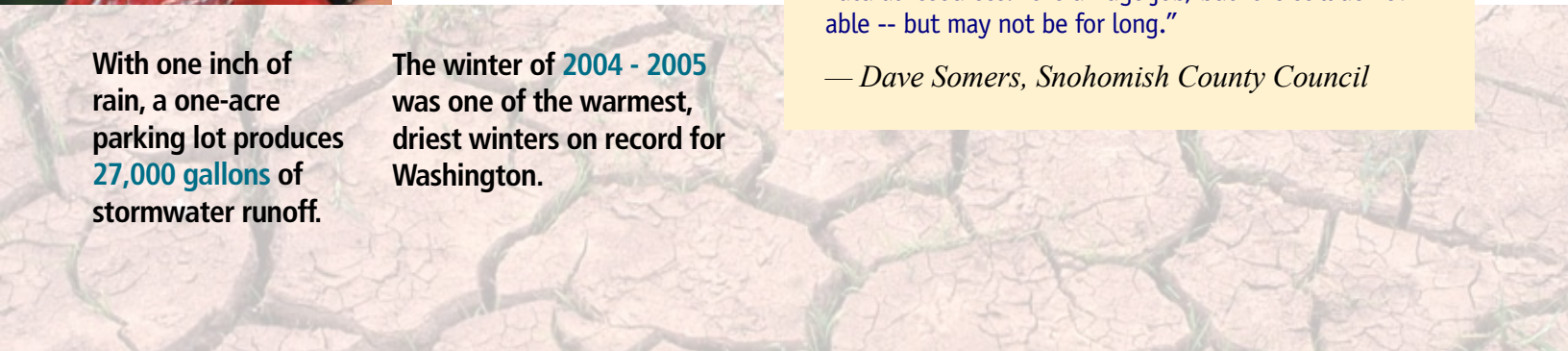
The coming years will see even more pressure on water resources and our rivers and streams. Our policies of the past have failed us – from archaic water rights systems that promote waste and largely ignore the needs of our natural streams and rivers, to outmoded storm water control methods that lead to water quality degradation, destroy natural groundwater storage, and further the decline of Puget Sound and its tributaries. Our water governance system is also broken – water use is not adequately monitored, waste is not punished, and exemptions and loopholes eat away at our dwindling water resources.

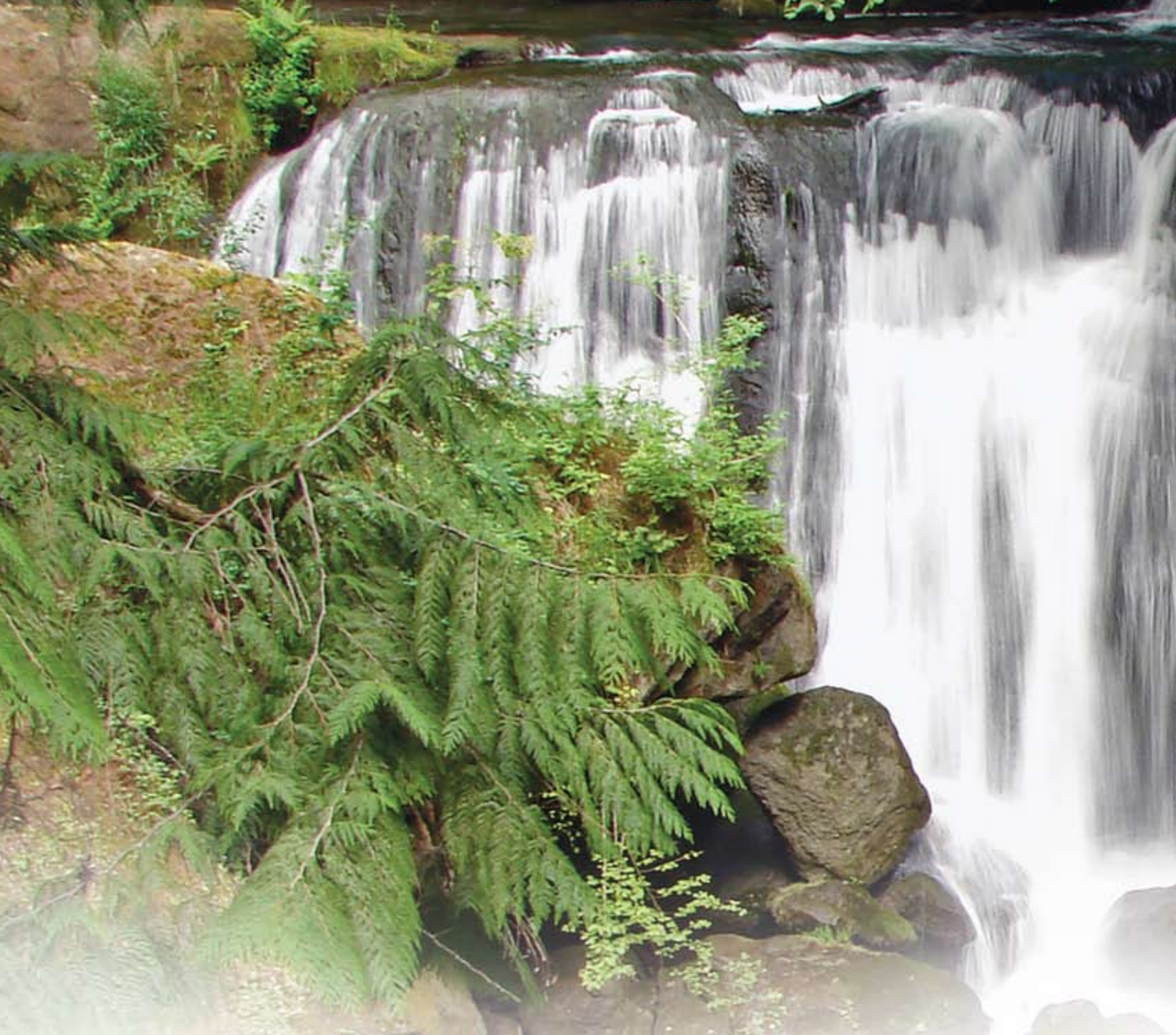
We need an overhaul that puts the needs of our natural systems first and is guided by the goal of long term sustainability. We need to do more to encourage conservation, eliminate waste, and reverse the decline of our natural resources. It is a huge job, but it is still achievable -- but may not be for long.”

— *Dave Somers, Snohomish County Council*

With one inch of rain, a one-acre parking lot produces **27,000 gallons** of stormwater runoff.

The winter of **2004 - 2005** was one of the warmest, driest winters on record for Washington.





For more information and to take action, visit [www.waterforwashington.org](http://www.waterforwashington.org)



American Rivers  
206.213.0330  
[www.americanrivers.org](http://www.americanrivers.org)



Washington Environmental  
Council  
206.631.2600  
[www.wecprotects.org](http://www.wecprotects.org)



Washington Rivers Conservancy  
509.888.0970  
[www.warivers.org](http://www.warivers.org)

**Cover:** Elwha River by Scott Church; cracked mud in Chehalis watershed by Brian Walsh. **Page 1:** Whatcom Falls courtesy of Shutterstock; irrigation system by Moon Rhythm on Flickr. **Page 2:** Fishermen by margaritanitz on Flickr. **Page 3:** Peshastin Creek courtesy WEC; new home signs in Snoqualmie watershed by Connie Kelleher; heron on the Hoh River by Carlin Alan Photography. **Page 4:** center pivot irrigation in eastern Washington by Ross Freeman. **Page 5:** Columbia River courtesy WEC; Walla Walla farm by Sara Kitamura; salmon in Bear Creek courtesy American Rivers. **Page 6:** boy drinking from hose courtesy NRCS. **Back cover:** Cedar Creek in Southwest Washington courtesy of Shutterstock.