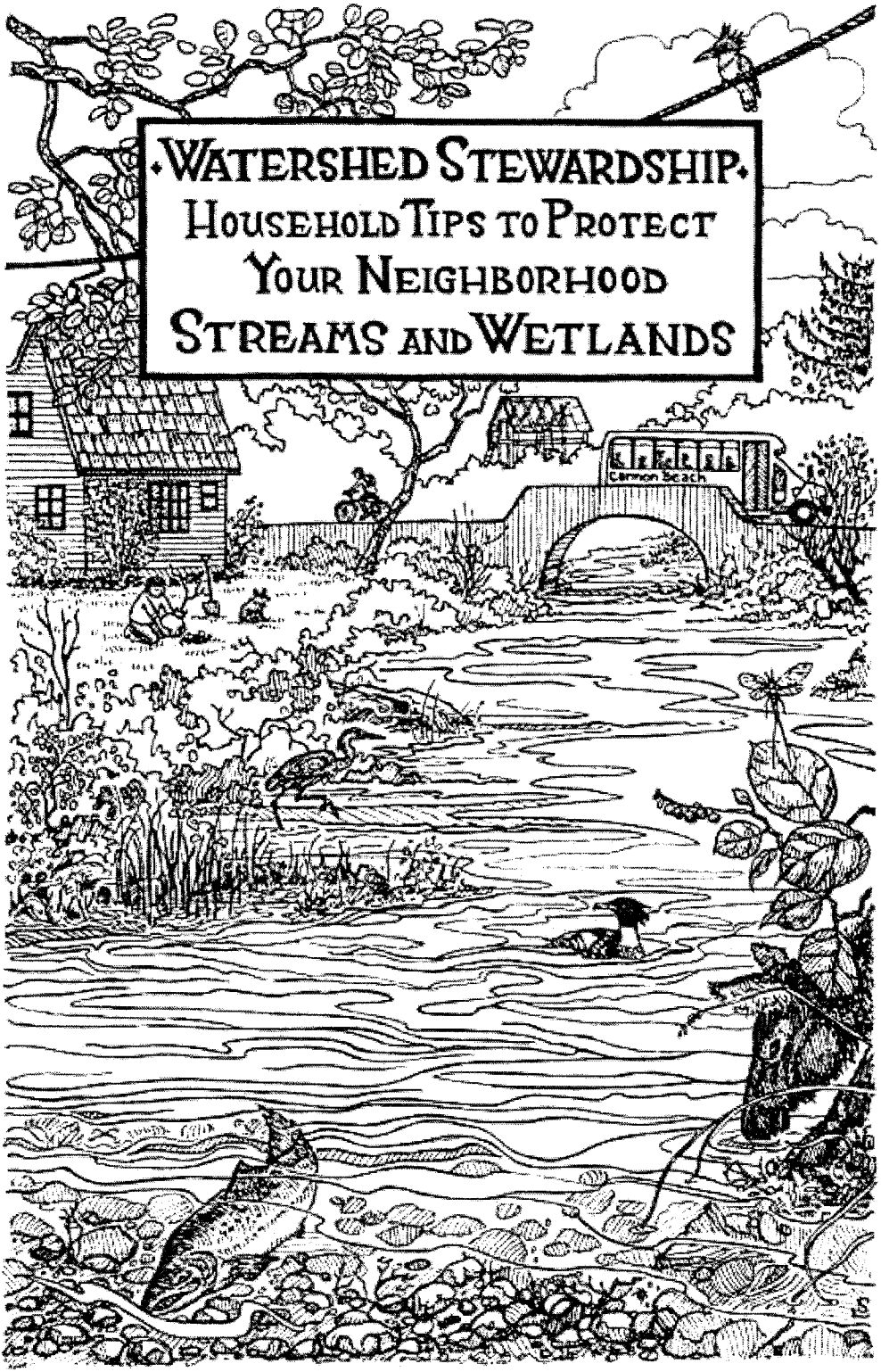
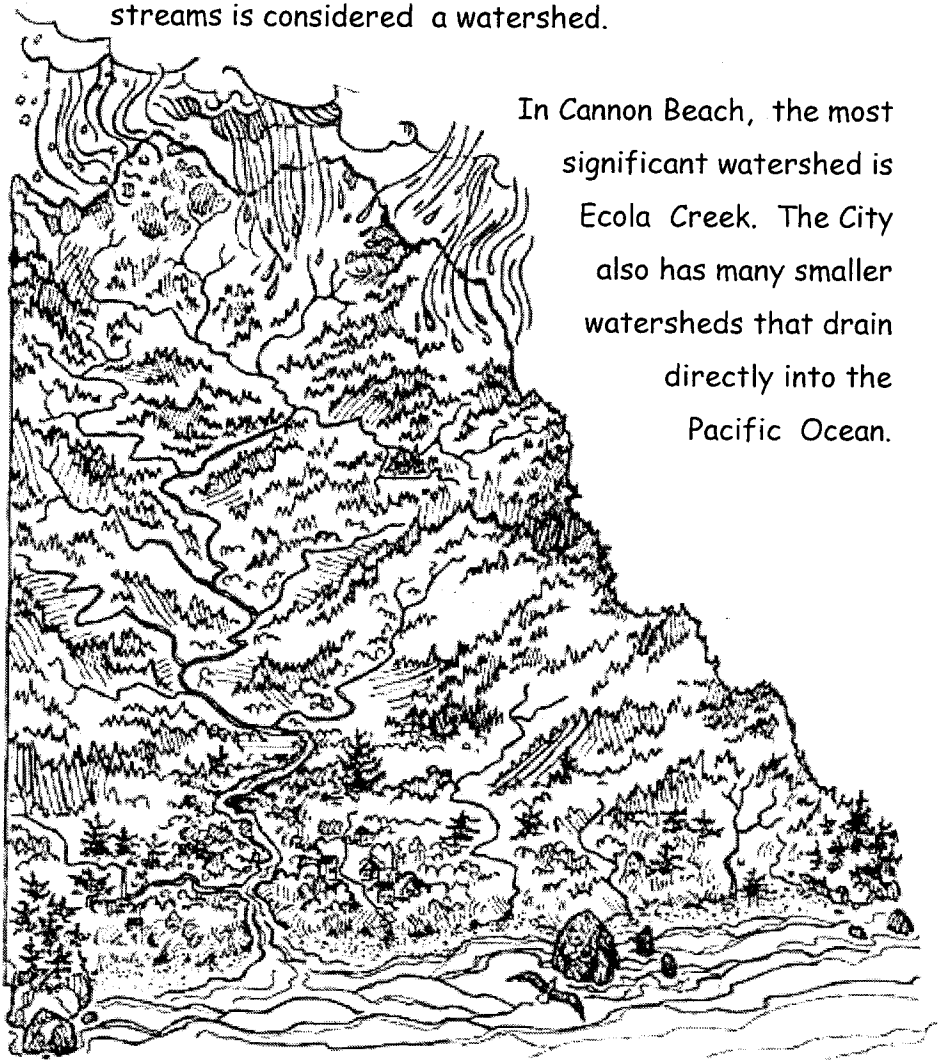
Watershed Stewardship

Household Tips to Protect Your Neighborhood Streams and Wetlands



What is a Watershed?

The rain that falls to the earth either runs directly into a stream or soaks into the ground. Surface and ground water flow from higher elevations to lower springs, streams, wetlands and lakes. As streams become larger on their way to the ocean, they contain more and more surface and associated ground water. The entire land area that is drained by a specific network of streams is considered a watershed.



In Cannon Beach, the most significant watershed is Ecola Creek. The City also has many smaller watersheds that drain directly into the Pacific Ocean.

Our Watershed's Health Starts with You

What we do in our daily lives- from washing a car to fertilizing the lawn to watering the garden- can affect the health of our watershed. Water runs off our driveways and yards and flows to the nearest wetland or stream. The contaminants that the water picks up along the way affect water quality. Maybe it's a leaky oil pan in your car or a pesticide applied to a garden; if it enters a stream or wetland, it can adversely affect an entire ecosystem.

Our everyday decisions about water usage also directly impact the local watershed because the city obtains our water from spring water associated with Ecola Creek and during the summer, from the creek itself.

Understanding how our activities affect our watershed is an important start in protecting the integrity of the watershed. This brochure is intended to provide information on what you can do to protect the health of the watershed. The quality of our waters- our streams and wetlands- depends on us.

Why Should We Care About Protecting Our Streams and Wetlands?

In Cannon Beach, healthy streams are important to our quality of life. Wetlands, streams and riparian areas (the edges of streams and rivers) play a vital role in maintaining a healthy ecosystem. Maintaining the health of the Ecola Creek watershed is particularly important since Ecola Creek and its main tributary, Logan Creek support coastal coho salmon, which is a threatened species under the Endangered Species Act. Following are several reasons why wetlands, streams and riparian areas are important.

Wetland and Riparian Area Functions:

- **Fish Habitat-** Riparian vegetation is critical in regulating water temperature, which is very important to salmon because they are susceptible to elevated water temperature. Riparian vegetation also provides food, cover from predators and are spawning and rearing areas for salmon.

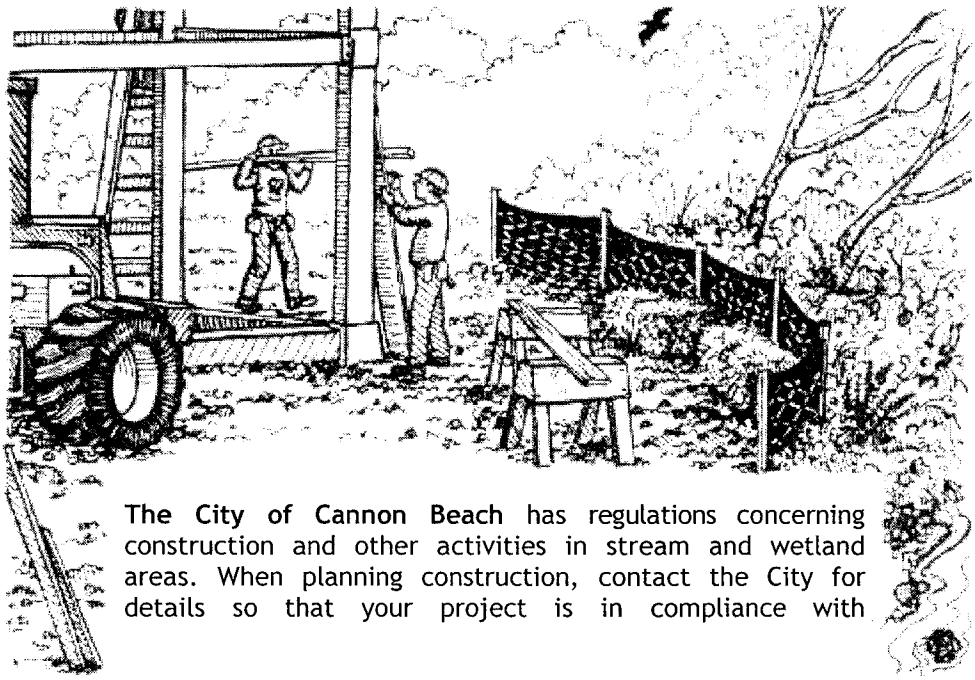
- **Wildlife Habitat-** Wetlands, streams and riparian areas provide a diversity of habitat for many wildlife species. These areas provide wildlife with water, food and shelter.

- **Water Quality-** Wetlands filter out chemicals, such as nitrogen and phosphorus from fertilizers, and other water-borne pollutants. Wetlands also trap sediments from waters that pass through them. Excessive amounts of sediment can damage the aquatic ecosystem and fish habitat.

- **Flood control-** Wetlands function as natural water storage areas during periods of flooding. This stored flood water is then released slowly downstream, minimizing the negative impact of the flood water on stream banks.

What you can do...
On the Construction Site

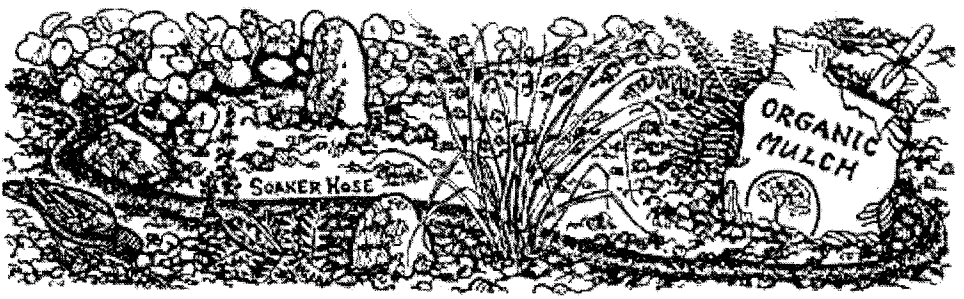
- Plan new construction away from streams and wetlands.
- Minimize paved areas. Keep walkways and driveways small.
- Leave as wide a vegetation buffer as possible between building and riparian areas.
- Protect and save as many native plants as possible, especially near streams and wetlands.
- Prevent sediment from entering streams and wetlands by using straw bales, bio-filter bags, silt fences and other erosion control devices.
- Keep heavy equipment away from streambanks and out of streams and wetlands.
- Communicate your intent to protect streams, wetlands and riparian areas to construction workers.



The City of Cannon Beach has regulations concerning construction and other activities in stream and wetland areas. When planning construction, contact the City for details so that your project is in compliance with

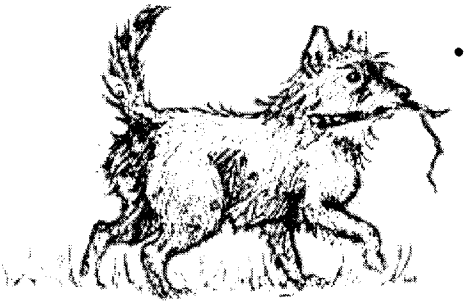
What you can do...
Around the Home & Yard

- Minimize the use of toxic chemicals in your home and yard.
- Reduce water consumption, particularly in the summer.
- Sweep driveways, decks and patios instead of pressure washing or hosing them down.



- Replace your gas lawn mower with a push or electric mower.
- Drive your vehicle less to reduce automotive fluid leaks.
- Tune up your vehicle regularly to prevent leaks.
- Wash your vehicle on grass instead of the street or driveway. Use minimal amounts of biodegradable soap and water.

Cannon Beach has regulations for protecting streams and wetlands. These regulations include a 5 foot buffer adjacent to wetlands and a 10 foot buffer adjacent to both sides of a stream, except Logan Creek where the buffer is 15 Feet. Contact the City for details about permitted and prohibited activities in buffer areas.

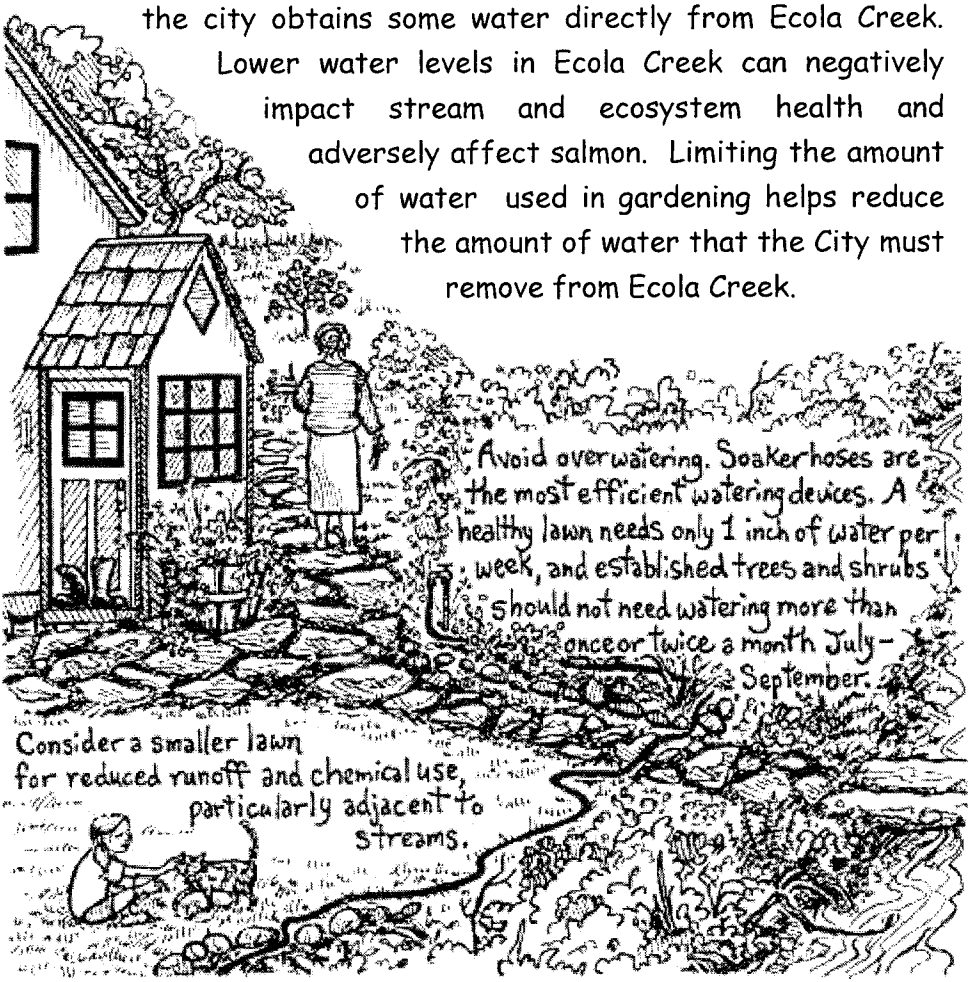


- Keep dogs out of streams and wetlands.
- Pick up pet waste and dispose of in a garbage can.
- Do not remove water from a stream, or change its flow.
- Leave naturally occurring logs, branches and rocks in streams and wetlands for habitat.
- Use ground covers or mulch bare soil to prevent erosion. Mulch with wood chips, straw, grass clippings or leaves.
- Don't mow the edge of a stream or wetlands. Leave a buffer.
- Keep yard debris- grass clippings, leaves and compost- away from streams and wetlands.
- Teach your children to be stewards of their stream.

What you can do...
In the Garden

Gardening is generally viewed as enhancing our environment. However, garden pesticides, herbicides, fertilizers and soil erosion can contaminate streams, wetlands, and groundwater. Since water quality is an important element of healthy habitat for salmon and other wildlife, it is important that our gardening practices do not contribute to water contamination.

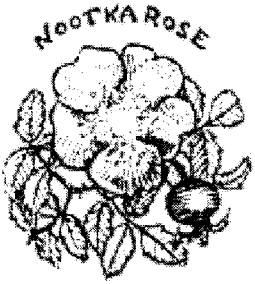
Water used in gardening is a significant contributor to the overall use of water during the summer months. In the summer, the city obtains some water directly from Ecola Creek. Lower water levels in Ecola Creek can negatively impact stream and ecosystem health and adversely affect salmon. Limiting the amount of water used in gardening helps reduce the amount of water that the City must remove from Ecola Creek.



Preserve established trees and shrubs in your yard, especially native species.
Avoid using chemical pesticides and herbicides.
If you use chemical herbicides or pesticides, use sparingly and correctly.
Remove non-native, invasive plants such as Himalayan Blackberries, Holly, and English Ivy.
Reduce application of fertilizers and manure. Established plants do not need to be fertilized every year. Follow instructions closely.
Leave natural streamside and wetland vegetation alone.
Plant native and other drought-tolerant plants.
Plant trees, shrubs, and groundcovers to reduce erosion and runoff, and filter pollutants.

Native Plants

There are many native plants available that can be used to establish a beautiful, low-maintenance garden. The following are some examples that do well in our area.



Low Ground Covers

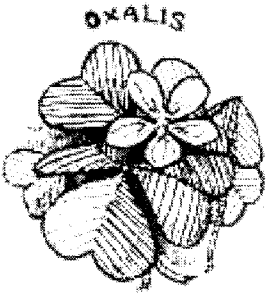
Kinnikinnick

Bunchberry

Creeping Oregon Grape

Oxalis

Sweet Woodruff



Herbaceous Plants

Lupine

Bleeding Heart

Sword & Deer Ferns

Maidenhair & Lady Ferns

Slough Sedge

Trees

Sitka Spruce

Western Red Cedar

Vine Maple

Willows

Oregon Ash

Western Hemlock

Shrubs

Red Flowering Currant

Nootka Rose

Ocean Spray

Oregon Grape

Snowberry

Pacific Ninebark

Salmonberry

Thimbleberry

Snowberry

Red Elderberry

Huckleberries

Red Osier Dogwood

Salal

Spirea

Want to Learn More about Protecting Your Streams and Wetlands?

Call the **Clatsop Master Gardener Hotline** with gardening questions, especially about weeds, pests and chemical applications. Phone: (503) 325-8573.

Check out the following websites:

Clatsop Watershed Councils
www.clatsopwatersheds.org

Oregon Plan for Salmon & Watersheds
www.oregon-plan.org

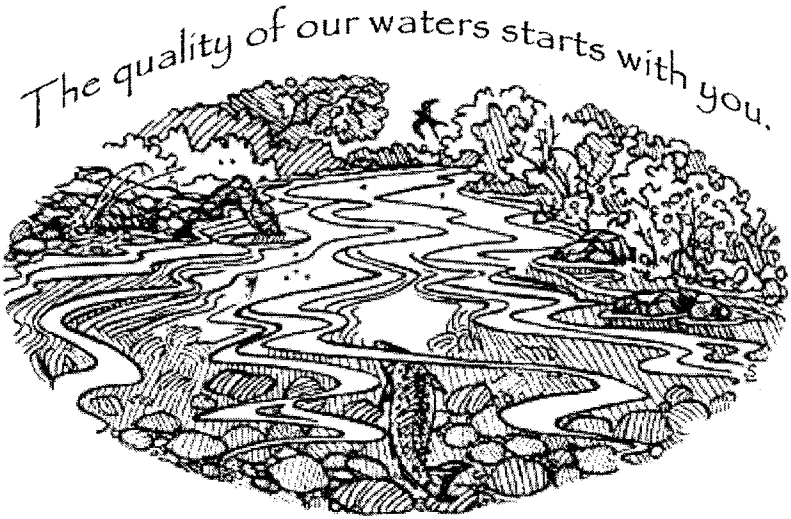
Native Plant Selection Guide
http://emswcd.org/native-plants/native-plant-database/

Natural Gardening
www.oregonmetro.gov/tools-living/yard-and-garden

Washington Master Gardeners
http://mastergardener.wsu.edu

Oregon Master Gardeners
http://extension.oregonstate.edu/mg .html

Thank you for caring about your neighborhood streams and wetlands.



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