#### **Become a Salmon Steward**

Around the world, people are working together to build stronger communities, create healthier environments, and raise awareness of endangered species. It will take all of us working together to build a healthier future for salmon. Below are a few ways you can get involved.

#### Be a Salmon-Friendly Gardener

Whether you have a big yard or a few planters on a balcony, your greenspace affects salmon. By making small gardening changes, you can make a big difference.



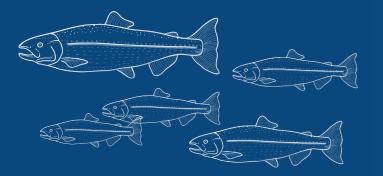
#### Support Salmon Education

These English and Spanish resources help students understand the cultural, economic, and ecological importance of salmon and how they can become salmon stewards.

#### Take Action for Marine Species

There are many little things we can do at home, school, and work to improve our community, the environment, and the waterways on which marine species depend.





### Credits Salmon illustrations: Ava Hays Centerfold habitat illustration: Blane Bellerud

For more information Visit: <u>www.fisheries.noaa.gov</u> Email: <u>wcr.education@noaa.gov</u>

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## **Seeds for Salmon**

Gardening to Improve Salmon Habitat

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West Coast Region

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No matter the size of your greenspace, you can adopt salmon-friendly gardening practices. All salmon need cool, clean water, connected waterways, and complex habitat to thrive.

#### The Connection Between Your Greenspace and Salmon

Salmon play a vital role in cultures, economies, and ecosystems around the world. Their survival is threatened by mounting human-caused challenges such as climate change, habitat loss, and pollution. With a few tweaks to your gardening and landscaping routines, you can make a real difference for water quality and our iconic Pacific salmon.

#### **Pesticides and Herbicides**

Pesticides and herbicides can make their way into waterways through <u>runoff</u>. When these pollutants reach creeks, streams, and rivers, they can impair reproduction, stunt growth, and even kill fish.

#### **Fertilizers**

When too many nutrients from fertilizers run off into local creeks, streams, and rivers, they can cause algal blooms and low-oxygen (hypoxic) waters. When oxygen levels become too low, fish and other aquatic organisms will die.

#### Water Use

All salmon need cool, clean water. Across the West Coast, Pacific salmon are increasingly affected by <u>drought</u> due to climate change. Watering responsibly will help conserve water for salmon and other aquatic species.

#### **STEP 1: BUILD HEALTHY SOIL**

The first stop on our salmon–friendly gardening journey is learning how to build healthy soil. The most important start for any project is its foundation. So, what holds everything together in a garden? **Soil!** 

Healthy soil is the foundation of healthy, productive gardens and landscapes.

#### Learn what your soil needs

A soil test will tell you what nutrients your soil needs.

#### Amend your soil

Learn about the soil your plants require and amend it with compost as needed.

#### Mulch it

Mulch prevents weeds, feeds the soil, and helps conserve water. Add 1-3 inches of mulch as needed. Keep it about an inch away from stems and trunks.

#### **STEP 2: CHOOSE NATIVE PLANTS**

Now that you've built healthy soil, it's time to select the right plants for your site. Whenever possible, opt for native plants. Simply put, native plants are the ones naturally found in a region, ecosystem, or habitat. Native plants provide the foundation for healthy ecosystems. When they are properly located, they require less water, fertilizer, and maintenance than non-native plants.

The fruits and berries of native plants are critical to the survival of native wildlife. Native plants provide muchneeded food and shelter for native insects—some of which salmon eat during their early life cycle stages.

Learning about native plants connects us to our environment and helps us learn how people of a particular culture and region make use of native plants (<u>ethnobotany</u>). For example, salmonberry is intimately



On the left-hand side a person is holding healthy soil. It is moist and a rich blackbrown color. On the right-hand side a person is holding poor soil. It appears dry and almost sand-like.



The flower and fruit of salmonberry (Rubus spectabilis).

tied to the health of rivers and tributaries in the Pacific Northwest. And some Indigenous communities from the Pacific Northwest teach that salmonberry is an <u>environmental indicator</u> for salmon runs.

#### **STEP 3: WATER WISELY**

All salmon need cool, clean water to survive. Across the West Coast, Pacific salmon are being affected by drought, which is increasing in the U.S. West due to climate change. When we use water wisely, we do our part to help salmon and other aquatic species. Building healthy soil and planting native species are two great ways to conserve water in your greenspace. To take your water conservation efforts to the next level, water deeply, water at the base, and water in the morning. For more tips, visit <u>WaterSense</u> from the EPA.

#### STEP 4: USE NATURAL CONTROL METHODS

A greenspace with healthy soil and well-sited native plants will need little or no pesticides and herbicides. Whenever possible, weed by hand or with gardening tools. If you must reach for a control method, look for organic options or those labeled with the EPA's <u>Safer</u> <u>Choice</u> label. Always follow the directions closely.

#### **STEP 5: KEEP LEARNING**

While changing your gardening routine might feel daunting, there are many resources and tools to help you throughout your journey. Visit our <u>Seeds for Salmon</u> <u>webpage</u> for more detailed instructions. And many local <u>Native Plant Societies</u>, <u>Master Gardener Programs</u>, or <u>native plant nurseries</u> are available to answer questions about natural gardening methods.