Nous Impect on Salmon Ashish A Self-Assessment



How do your personal actions, at home, at work or anywhere in your community, affect salmon and your quality of life?

Your Impact on Salmon/Fish A Self-Assessment

Protecting Salmon/ Fish by your choices.

Every household and property owner is responsible for our land and water. Consider how you manage your home and property to make it a healthy living space for you and your family; a valuable asset; and a place which protects your fish and wildlife legacy.

Your Goal:

Your goal is to protect your land and quality of life while helping salmon. This assessment guides your choices to achieve this goal.

Why should you be concerned?

Salmon and other fish are in decline in the Northwest. We must act now to save salmon and protect our lifestyle. Salmon are one link in a complex food chain and depend on a healthy environment to maintain their populations. If salmon disappear, so will other species, and our quality of life will change. The decline of salmon is a warning to us to act now to maintain and restore the natural environment which sustains us.

What can you do?

This assessment has been designed to make you aware of your practices that increase the risk of hurting salmon and degrading our quality of life.

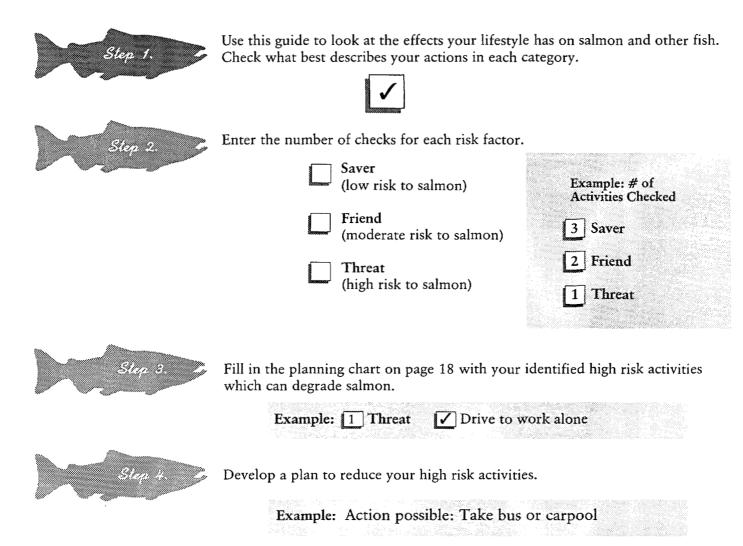
Take action now by completing the "Action Plan" worksheet located at the end of this booklet.

"It isn't just our salmon that are in trouble—
it's our Northwest quality of life that is in trouble.
We're all connected by our land and water.
When rivers flood and our lakes are polluted,
people and fish are hurt."

-Governor Locke, February 1998

Assessing Your Impact on Salmon/Fish

How do your personal actions, at home, at work or anywhere in your community, affect salmon and your quality of life?



Definitions:

A Salmon Saver Activity is one that helps salmon and protects our quality of life.

A Salmon Friendly Activity is one that has a neutral effect on salmon and quality of life.

A Salmon Threatening Activity is one that harms salmon and degrades quality of life.

Note: If you have checked activities which harm salmon, you can learn how to do things differently through the "Get Help" groups listed.

Household Water Use

Get help from:

- ♦ Cooperative Extension
- Public Utility Districts
- City Water Utilities

Garden/Lawn Water Vse

Get help from:

- Conservation District
- ♦ Cooperative Extension

As a Salmon Saver You

	Look at household water use to find ways to use less. Ideally use less than 20 gallons of water per day per person.
A basic need	Install low flow toilets and save up to 34,000 gallons of water per year.
of fish is water.	Install low flow shower-heads and reduce water use by 70%.
The more water you take from streams and	
groundwater,	
the less is	Minimize water use on gardens. Reduce lawn watering during summer. Use drip irrigation in
available for fish passage	garden.
and habitat.	
	Maintain an organic lawn or reduce the size of your lawn.
	Grow native plants that use less water.

Landscaping

Get help from:

- ♦ WDFW Backyard Sanctuary Publications
- ♦ Cooperative Extension
- Local plant nurseries
- Conservation Districts often have an annual native plant sale at wholesale prices.
- City water utilites
- ♦ County Environmental Departments

See pg. 17 for inf ormation on native plants.

Mow it high	Keep surface areas natural where possible: poke holes in ground to increase water absorption.
and let it lie. Lawns do not absorb rain well.	Maximize use of native plants in landscaping and reduce lawn size. Enjoy the benefits of native plants which attract wildlife, do not need fertilizers or pesticides, are drought resistant and need little
Native plants absorb rain, reducing the	maintainance. Make sure rainwater drains to yard, not street or septic drain field.
amount of runoff	Use efficient watering system; don't over-water.

As a Salmon Ariend You

As a Salmon Threat You

Your Impact
Activities Checked

Griend You	Threat You	# Activities Checked
Use as little household water for washing, cleaning, flushing, etc. as possible. Limit bath and shower time. Reduce toilet flush volume by installing a displacement device and save up to 12,000 gallons of water per year.	Do not take into account household water use. Use more than 60 gallons per person per day. Take long showers at full blast	Saver Friend Threat
Minimize water use on gardens and lawns. Water lawn and plants early morning and evening when more water is absorbed. Turn off water at first sign the ground is saturated to allow time for water to be absorbed.	Use more water than necessary on your garden.	Saver Friend Threat
Use some native plants in landscaping. Use mulching lawn mower. Set lawnmower to 2-3" height to get deeper healthier grass roots which retain moisture.	Remove native plant species and plant lawns. Appy lots of water to landscape plants.	Saver Friend Threat



As a Salmon Saver You

Electricity Consumption

Get help from:

- Local utilities can survey your energy use and make suggestions to reduce it.
- ♦ Local non-profit groups e.g. Energy Outreach Center
- Energy Extension at Cooperation Extension

In the Northwest electricity is largely generated through bydroelectric dams.
Some dams block fish passage.

Using less
electricity reduces
the need for
dam-generated
power, and leaves
more water to
carry young
salmon to sea

Turn lights off and help save a salmon.

Survey household electrical use and follow
 family plan to reduce.

Schedule electrical use for non-peak periods.

Pesticides and Weed Killers

Get help from:

- ♦ Cooperative Extension
- Conservation District
- The Toxics Coalition
- · Local weed board
- 1-800-RECYCLE (to find out how to dispose)

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Fact: The cumulative effects of household use are 70 times more than agricultural use.

These are hazardous wastes that can poison fish, wildlife and vegetation, and eventually affect human health.

Use Integrated Pest Management. (Get help from cooperative extension or conservation
district.)

Be happy with less-than-perfect plant specimens and lawn.

Use:

 	Avoid use of weed killers.	Pull weeds by hand
	Use natural substitutes	

Storage:

Store chemicals where there's no chance for them to pollute surface or ground water.
Store chemicals in original containers which

Store chemicals in original containers which are sealed and covered.

Disposal:

Dispose of chemicals at designated hazardous
 waste sites.

Threat

	Minimize electricity use. Buy energy efficient electrical appliances.	Make no effort to reduce electricity use. Leave lights on in unoccupied rooms.	Saver Friend Threat
_	Seldom use pesticides and weed killers. Follow label instructions carefully.	Do not follow chemical application guidelines. Use weed killers to control weeds	Saver Friend

Integrated Pest Management Hints:

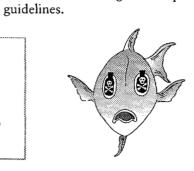
Never put left-over chemicals down drain.

- Monitor pest populations and use pesticides as a last resort after first trying all other methods.
- Plant pest resistant varieties.

Use pest-resistant plants in landscaping.

Storage and Disposal:

• Maintain healthy plants and full ground cover to minimize pests and weeds.



Do not follow storage and disposal

Storage and Disposal:

As a Salmon Saver You

Gertilizers

Get help from:

- ♦ Cooperative Extension
- Conservation District

Natural Use

Fertilizers reduce good fish habitat by promoting excessive growth of aquatic plants that deplete oxygen for fish.

- Use home compost on garden, instead of commercial fertilizers.
- Keep use of nitrogen fertilizers to a bare minimum.
- Test soil to make sure you use appropriate fertilizer.
- Use slow release natural fertilizers.

Phosphates in Detergents

- Hint: Usually liquid detergents contain less phosphate than powders.
- Hint: Electric dishwashing detergent often contains high phosphorus.

Reduce your use

Phosphates reduce good fish habitat by promoting excessive growth of aquatic plants that deplete oxygen for fish.

Use only low phosphate detergents for all household purposes.

Provide suggestions to grocery stores to stock low phosphate detergents.

Septic Systems

Get help from:

 City and County Health Department on septic system maintenance In septic drainfields that fail the waste products percolate through the soil into the ground water, reaching streams & wetlands with pollution that depletes oxygen needed by fish.

Pump	sentic	tank	every	2-3	vears
rumo	SEDUC	tank	CVCIV	4-5	years.

- Inspect annually when indicated, and avoid flushing non-biodegradable items and toxics. Avoid "drowning" the system with too much water at once.
- Prevent compacting soil over drainfield by vehicles and large animals.
- Don't use garbage disposal-or you don't have one.
- Don't use chemical additives that are sold to improve septic function.

As a Salmon Ariend You

As a Salmon Threat You

Your Impact «Activities Charled

Seldom use fertilizers. Follow label instructions carefully.	Pay little attention to fertilizer application guidelines. Use petroleum-based fertilizers.	Saver Friend Threat
Look for detergents labeled low phosphate at local grocery store and buy when available.	Disregard phosphate content of detergents.	Saver Friend Threat
Pump every 3-5 years. Inspect every few years. Use garbage disposal on a limited basis. Keep deep rooted plants off septic drainfield.	Unsure when (or if) last pumping occurred or where drainfield is located. Use garbage disposal regularly. Pour hazardous chemicals down household drains.	Saver Friend Threat

As a Salmon Saver You

Storm Drains

Get help from:

- ♦ City & County Stormwater Department
- ♦ Cooperative Extension

Reduce Runoff from Property.

Get help from:

- Conservation Districts
- Cooperative Extension
- Stormwater/surface water authority

Runoff from urban/suburban property mainly goes to storm drains.

Most storm drains go directly to streams, wetlands & lakes - the wastes and runoff water entering the drain do not go to the sewage treatment plant.

These hazardous wastes poison fish, wildlife and their habitat.

Never dump waste materials in storm drains – especially oils, paints, antifreeze, or household chemicals of any kind.
enemicals of any killa.

Take hazardous waste to local	hazardous v	waste
 disposal facility.		

	Drain rainwater from roof to yard where it is
_	absorbed and kept off street or drainfield.

Sweep	driveways	and	sidewalks	with a	a broom,	not
 the ho	ce.					

Maintain your	neighborhood	stormwater	pond (in
Maintain your newer housing	developments)		

Cars/Trucks

Get help from:

- Regional Transit Authorities
- State Department of Transportation
- Stormwater/surface water authority

***** T .
Washing
driveways &
sidewalks sends
car-generated
pollutants into the
stormwater drains
which go directly to
streams and wet-
lands and poison
fish.

Wash car on lawn; so water won't drain to street or storm drains. Or go to a commercial car wash where waste water is recycled.
Check for oil & radiator leaks often and repair them at once.

	Use mass transit, car pools, walking or bicycling as
1	often as possible.

As a Salmon Griend You

As a Salmon Threat You

Your Impact a Admitis Checked

Prevent, where possible, waste materials from reaching storm drains.	Dispose of oil, paint and household waste down storm drains.		ver iend areat
Minimize paved area on property. Limit size of your driveway and patio to no bigger than necessary.	Cover property with lawn or leaves bare soil. Remove native vegetation. Maintain wide concrete or asphalt driveway. Spray and wash away driveway and sidewalk debris. Put in a tennis court and extra paved parking for RV's, boats, and guests.	Fri	ver iend ireat
Have mechanic check for oil & radiator leaks when car is serviced. Car pool or use mass transit sometimes. Or drive fuel-efficient car. Keep your vehicle(s) tuned for maximum efficiency.	Wash vehicle in driveway or on street. Do not check vehicle for leaks. Drive to work alone. Drive a gas guzzler.	Fr	iver riend hreat

As a Salmon Saver You

Living Near Water

Get help from:

- ♦ Conservation Districts
- WDFW
- Watershed Councils
- ♦ Cooperative Extension
- DOE

Waterfront owners bave the greatest opportunity as stewards to manage their property for salmon survival.

Wetlands and estuaries are the nurseries that keep young salmon safe

- Maintain native streamside vegetation the riparian zone– as habitat for fish and wildlife, to filter pollutants and minimize erosion.
- Replant with native plants if streamside plants have been removed –as wide a buffer as possible.
- Use natural ground cover or porous materials such as gravel or bark instead of asphalt and concrete for paths and drivesways.
 - Ensure roof runoff soaks into the ground. Avoid piping to ravines or streams as it causes erosion.
- Minimize steep slope and bank erosion by leaving trees and shrubs.

Managing Large Animals

Get help from:

- ♦ Cooperative Extension
- Conservation District
- City and County Utilities

Managing Small Animals

Get help from:

- Cooperative Extension have suggestions for pet waste disposal.
- ♦ City & county Environmental Health

Waste from
livestock and pets is
a major source of
water pollution,
degrading water
quality and the
supporting habitat
for fish.

	Fence	livestock	away	from	stream,	wetl	ands	or
1	lakes.							

- Consult local government recommendations on Best Management Practices to handle animal waste.
- Use best management practices for pastures and livestock facilities to minimize erosion and runoff

Scoop up all pet feces and flush down toilet.

As a Salmon Threat You

Your Impact# Activities Glocked

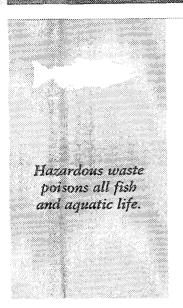
	Maintain native vegetation at stream side. Check often for signs of erosion and pollution	Landscape right up to the stream side, wetland or lake shore.	Saver
 _	-follow up with remedies if possible.	Remove native plants along shore line.	Friend
	Keep lawn and grass clippings off waterway banks and buffers. Use curbside pickup or compost clippings away from streams and ravines.	Pave paths leading to and around streams, wetlands and lake sides.	Threat
	A STORY AND A STOR		Saver Friend Threat
	Minimize animal access to streams.	Allow livestock to stand in stream.	لم
L_	Į.		
and the second second	Clean up pet feces on sidewalks, driveways and other impervious areas and throw in unused part of yard.	Leave pet feces where deposited.	Saver
	part or yaru.		Friend
		384 2 16 d ve a Millian	Threat

As a Salmon Saver You

Hazardous Waste

Get help from:

◆ All Department of Ecology regions have a 24 hour response line. Central WA, Yakima: (509) 575-2490 Eastern WA, Spokane: (509) 456-2926 Northwest WA, Bellevue: (425) 649-7000 Southwest WA, Lacey: (360) 407-6300



Keep a close watch for evidence of oil and other contamination in waterways, and report such occurences to authorities.

Becoming a Salmon Steward

Get help from

- WDFW publication: "NatureMapping for Fish and Streams" and "Restoring the Watershed."
- ♦ Conservation Districts
- Watershed Councils
- ♦ Local Stream Team
- Adopt-A-Stream
- Cooperative Extension Volunteer Programs,
 4H, Master Watershed Stewards

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1 1	wardship projects.
As:	sess the health of streams, wetlands or lakes.
Re	port data.
\[\begin{aligned} \nabla_0 & \to & \\ to & \end{aligned} \]	lunteer in the community do projects that help salmon such as:
	Riparian area planting
	Water and habitat monitoring
	Aquatic insect surveys
	Giving presentations to schools and adults on how they can make a difference.
	Helping with stream, wetland or lake enhancement projects
	Instream restoration with permits and technical expertise creating habitat in

♦ Websites:

http://salmo.cqs.washington.edu/~wagap/nm (Nature Mapping) http://www.wa.gov/ecology/wa/wow (Watch Over Washington)

As a Salmon Ariend You

Ar a Salmon Threat You

Your Impact Assistive Charles

Report spills.		Saver
		Friend
	Market Control of the Second Control of the	Threat
	Ignore neighbor pouring oil or chemicals into streams.	
	Ignore evidence of spill, expecting someone else to report.	
Seek assistance to assess the health of local watershed for salmon.	Believe salmon/fish are someone else's problem.	Saver
Know where the streams are located and what fish use them. Periodically walk the stream to check on water level and the presence of fish, and	Are unaware of local streams; their location, or the fish that use them.	Friend
to look for anything unusual.	Do not know where water drains from property.	Threat
Know where water from property drains.	Do not know what a watershed is.	
Watch for environmental changes in your community.		
Minimize your impact outdoors when recreating. Do not ride through streams on bikes. Stay on trails and do not trample streamside plants.		
Avoid vehicle travel off road and on muddy roads.		

As a Salmon Saver You

Volunteering

Get help from

- WDFW publication on "Restoring the Watershed"
- Watershed councils
- Salmon Enhancement Groups
- Sportsman groups
- Cooperative Extension Volunteer Programs (see website)
- Adopt-A-Stream Foundation
- ♦ Local Stream Teams
- *Save Our Stream & other organizations
- Regional Fisheries
 Enhancement Groups
- WDFW Website http ://www.wa.gov/wdfw
- Conservation Districts "Earth Team," etc.

Saving salmon/fish begins with you.

Your personal actions will make a measurable difference.

	Assess community	practices	according to	these
-	guidelines.			

Educate your community by offering training on what to do.

Get out on the streams and restore the habitat.

Regularly contribute volunteer hours to a project that improves the environment.

Participate in the running of a volunteer organization.

Getting Involved

Get help from:

- Department of Community Trade and Economic Development
- Check local city and county growth management plans for ordinances which affect salmon.

Local county commissions and city councils are deciding the future of fish, wildlife and salmon recovery through growth management plans.

Your input counts.

Check local growth management plans for policies that reflect good practices.

Seek changes in plans to make streams safe for fish.

Keep neighborhood associations informed on watershed health & neighborhood practices that could improve it.

************		*********	
	Hope to find more time to volunteer for local groups saving the salmon. Contribute a few volunteer hours or money to a project that improves the environment.		Saver Friend Threat
	Read the growth management plans and support local officials in developing policy which positively affects the environment. No Action is An Action!		Saver
	Participate in a neighborhood association.		Friend
			Threat

Beneficial Plants

Native and other plants recommended for your property that enhance salmon and wildlife habitat:

Western Washington

Eastern Washington

Trees:

Sitka spruce Red Alder

Black Hawthorn

Oregon Ash

Black cottonwood

Western hemlock

Douglas fir

Western Red Cedar

Grand Fir

Aspen

River Birch

Shrubs:

Serviceberry

Red-osier dogwood

Ninebark

Snowberry

Tall Oregon-grape

Oceanspray

Red-flowering current

Evergreen huckleberry

Salmonberry

Hazelnut

Vine Maple

Nootka Rose

Hardhack

Black twinberry

Red Elderberry

Trees:

Ponderosa pine

Douglas fir

Englemand Spruce

Black Cottonwood

Western Red Cedar

Quaking Aspen

Oregon White Oak

Shrubs:

Douglas hawthorne

Serviceberry

Woods rose

Chokecherry

Golden currant

Elderberry

Willow

Red-osier dogwood

Snowberry

Rabbitbush

Mock Orange

Bitterbrush

Grass cover:

Upland grass mix for Eastern WA.

Blue fescue

Great Basin wild rye

Idaho fescue

For information on tree and shrub species and planting guidelines:
Contact the Community Forestry Program: 1-800-523-TREE,
or Washington Dept. of Natural Resource Urban,
and WDFW Urban Wildlife Program 425-775-1311 Ext. 110

Plan to Save Salmon by limiting High Risk Activity

List activities that ranked "high risk - Threat"

Activity Identified as High Risk	Immediate Action Possible	Aurther Planning Required	Taking Action
	(change in activity only, cost not a factor)	(involves long term planning and cost)	(Proposed first step to address concern)

Central Contact Numbers

Washington Department of Fish and Wildlife (WDFW) 360-902-2200

Website: http://www.wa.gov/wdfw

Department of Ecology 360-407-6000

Department of Transportation (DOT) 360-705-7000

For an Environmental Emergency call Ecology 24-hour Emergency Spill Response Line: 360-407-6300

For information on Growth Management Planning in your area call: 360-753-2222

To Find a Conservation District in Your Area call: Conservation Commission: 360-407-6200 Website: http://www.conserver.org/wcc.html

To Find a Cooperative Extension Office in Your Area call:
Washington State University: 509-335-2811
Website: http://ext.wsu.edu - Link to CSANR and Master Gardeners

For Information on Disposal of Pesticides, Herbicides and other Hazardous Wastes call: Ecology Hazardous Waste Hotline: 1-800-RECYCLE

For Landscape Information call: Washington Native Plant Society: 1-888-288-8022

For Information on local City and County Sewer and Water Districts call: 253-872-4063

For Information on Public Utility Districts in your area call: Washington PUD Association: 206-682-3110

Washington Toxics Coalition: 1-800-844-SAFE

Washington Dept. of Natural Resources Forest Stewardship Program (Technical and Financial assistance to forest owners for forestry, fish and wildlife practices): 1-800-527-3305. Website: http://www.wa.gov/dnr. E-mail: forest_stewardship@wadnr.gov

Many individuals from the above groups were involved in the development and review of this document.

Written and Produced by Washington Project WILD Programs at WDFW

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This publication is available in alternative formats upon request Please call the Olympia office of the Washington Department of Fish and Wildlife at (360) 902-2207, or TDD (360)902-2207 for more information

