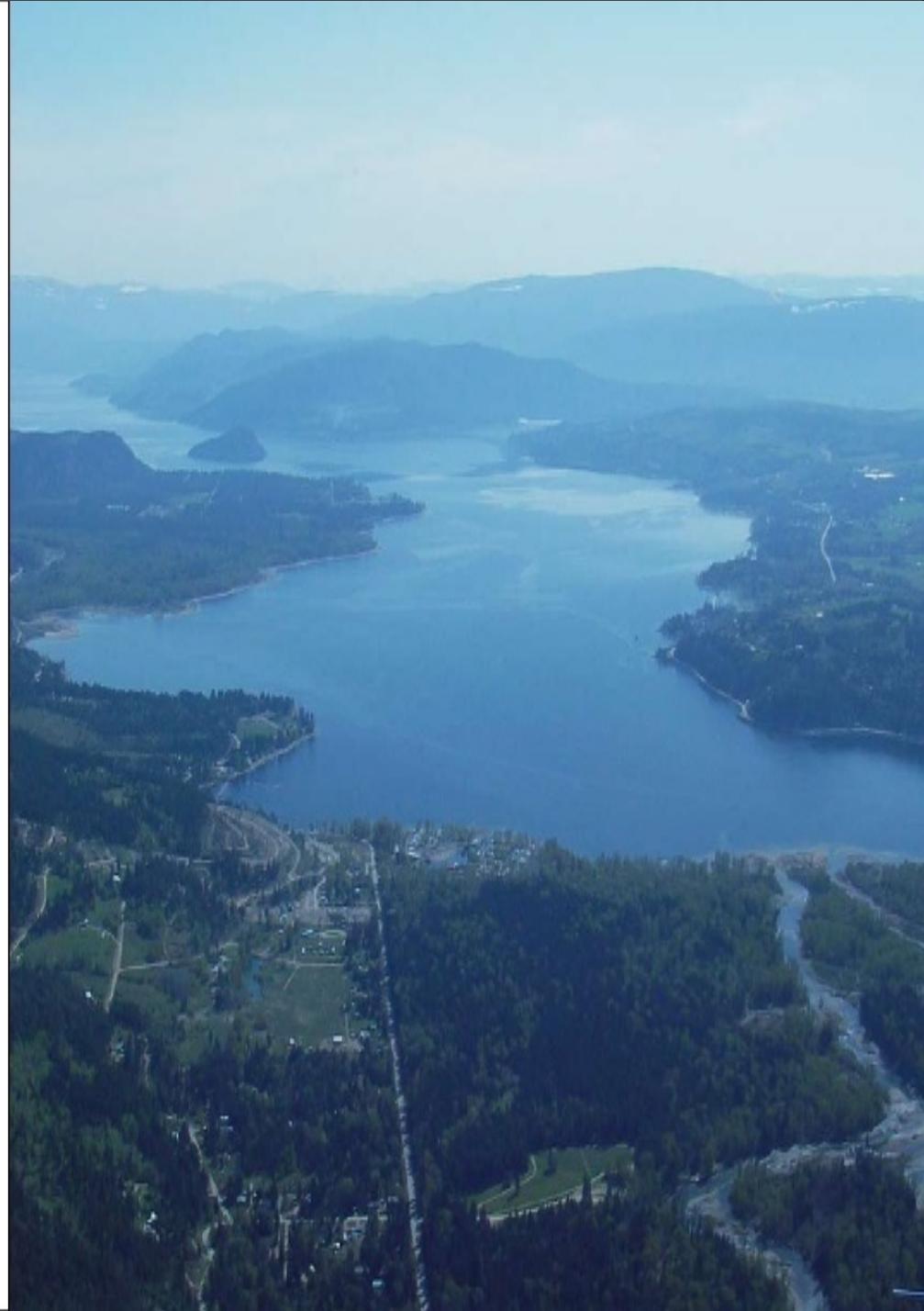


Shuswap Lake Integrated Planning Process (SLIPP)

Presentation to Cowichan
Waterboard

May 10, 2012



Concerns raised by the public about pressures on the lakes from:

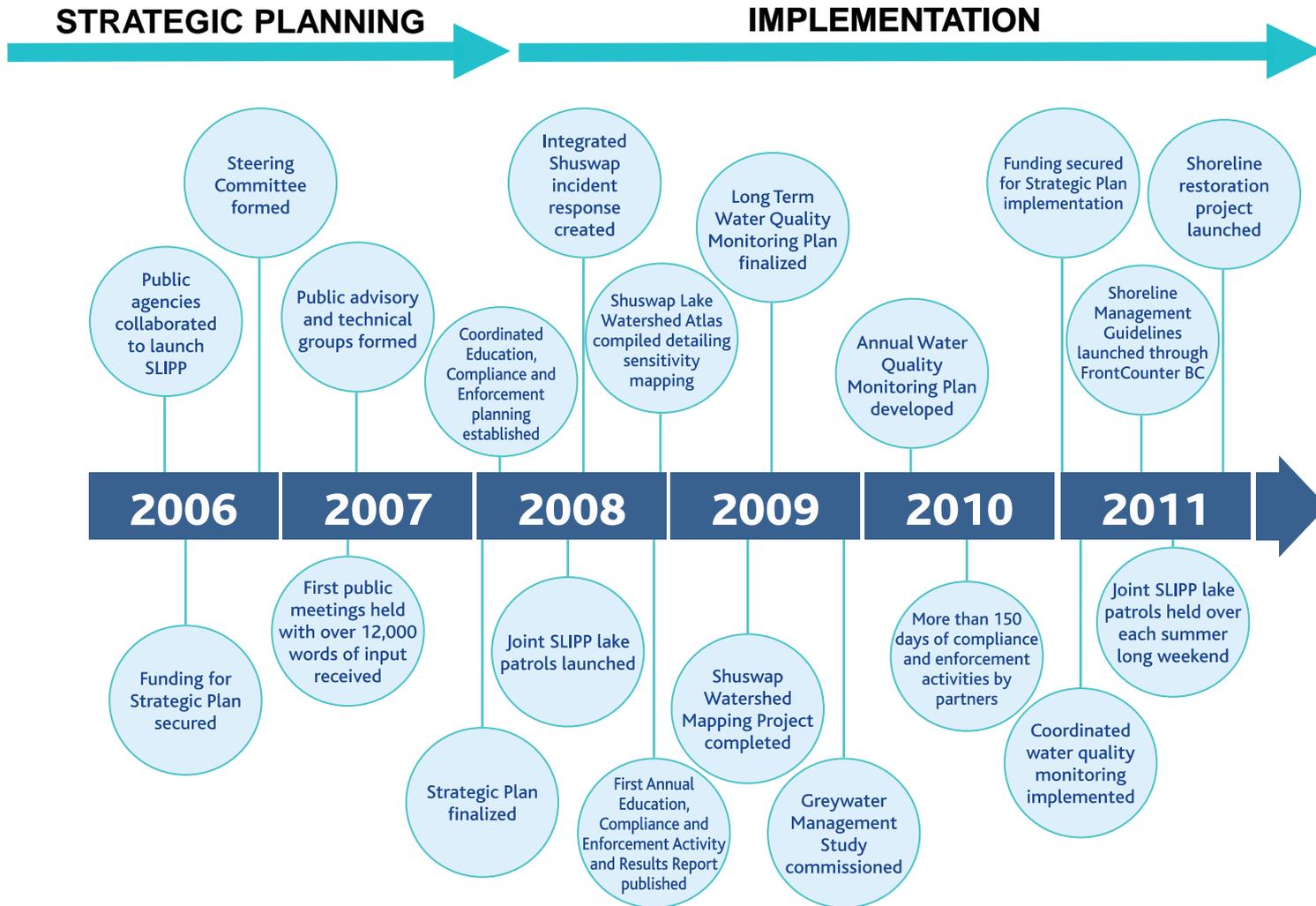
1. The fast pace of shoreline development
2. Degradation of water quality
3. Recreational use conflicts

Response complicated by a complex and overlapping government regulatory environment

→ The integrity of the lakes could be compromised



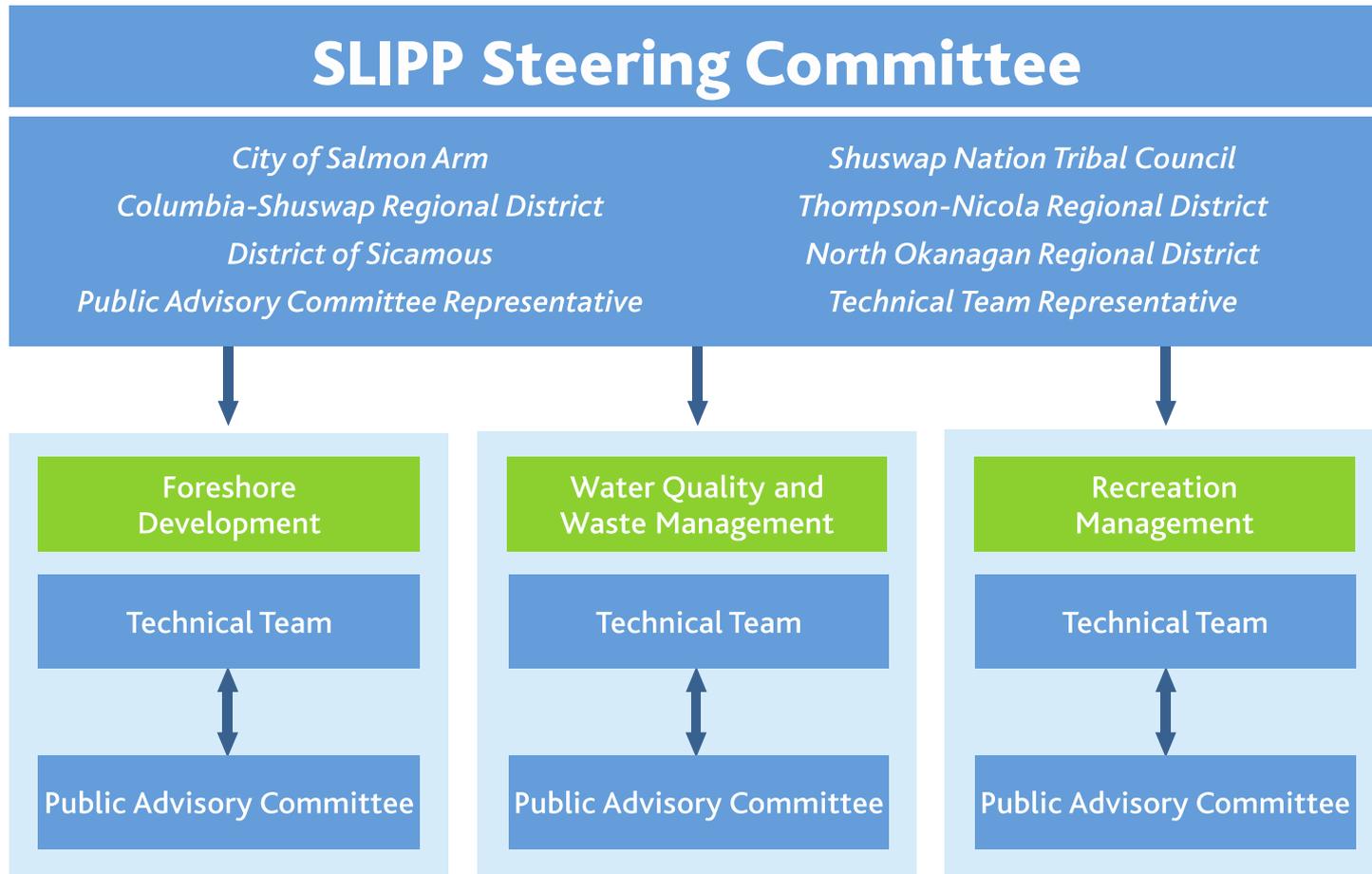
- The Shuswap Lake Integrated Planning Process
- A watershed-wide integrated planning and management initiative:
 - Coordinated planning and delivery
 - Innovative projects and research
- Involves public, First Nations, business and public agencies
- SLIPP developed a foundational Strategic Plan to address key issues
- Plan aims to:
 - Increase public safety on the water
 - Ensure a healthy shoreline and environment
 - Maintain high water quality
 - Create economic and recreation opportunities



100% of the strategies in SLIPP's Strategic Plan are being implemented

Vision	Working together to sustain the health and prosperity of the Shuswap and Mara lakes		
Goals	Development that respects the environment, as well as economic and social interests	Water quality that supports public and environmental health	Desirable recreational experiences that are safe and sustainable
Strategies	<ul style="list-style-type: none"> ✓ Create a comprehensive foreshore and upland area site sensitivity map for Shuswap and Mara lakes ✓ Form the Inter-Agency Technical Committee to manage cross-agency development applications and lake issues ✓ Improve the development application review process ✓ Create a model for assessing cumulative impact 	<ul style="list-style-type: none"> ✓ Develop an inter-agency water quality monitoring and reporting program ✓ Eliminate boat discharge on the lakes 	<ul style="list-style-type: none"> ✓ Develop a recreation management plan for the Shuswap and Mara lakes ✓ Develop a recreation use monitoring and reporting program
	<ul style="list-style-type: none"> ✓ Create the Professional and Scientific Advisory Group 	<ul style="list-style-type: none"> ✓ Establish a coordinated annual education, compliance and enforcement planning process 	<ul style="list-style-type: none"> ✓ Create the Shuswap Lake integrated response process ✓ Engage stakeholders in education, compliance and enforcement initiatives

SLIPP complements and enhances existing planning processes and involves a range of stakeholders



2012 - 14 Steering Committee Membership

SLIPP Partner	Steering Committee Representative
City of Salmon Arm	Mayor Cooper
Columbia Shuswap Regional District	Board Chair Bacigalupo
	Director Martin
	Director Morgan
	Director Talbot
District of Sicamous	Mayor Trouton
North Okanagan Regional District	Director Cyr
	Director Pearase
Shuswap Nation Tribal Council	Councillor Arnouse
	Dave Nordquist
Thompson-Nicola Regional District	Director Anderson
	Director Milobar
SLIPP Public Advisory Committee Rep	Ray Nadeau, Shuswap Water Action Team
SLIPP Technical Team Rep	To be confirmed

In 2011, new SLIPP funding for a 3 year pilot project was committed by the CSRD, Salmon Arm, Sicamous and the TNRD, in addition to ongoing funding from agencies – estimated at over \$.5 million a year

SLIPP activities	Expenses	Funding and in-kind support	New SLIPP Funding
Shoreline Development	\$150,000	\$100,000	\$50,000
Water Quality	\$280,000	\$150,000	\$130,000
Recreation Management	\$105,000	\$70,000	\$35,000
Compliance and Enforcement	\$185,000	\$150,000	\$35,000
Stakeholder Communication and Education	\$85,000	\$40,000	\$45,000
Admin, meetings, reporting, expenses	\$85,000	\$45,000	\$40,000
Total	\$890,000	\$555,000	\$335,000

Annual SLIPP Funding Calculations

Allocation of SLIPP Funding - by Residential Parcels

Area	Residential Parcels	Percentage	2011	2012	2013	Totals	2011 %
TNRD (fixed 3 years)			53,600	53,600	53,600	\$160,800	16.0%
Salmon Arm (fixed year 1)			20,000			\$20,000	6.0%
Sicamous (fixed year 1)			2,500			\$2,500	0.7%
Area E (fixed 3 years) (Gas Tax)			20,000	20,000	20,000	\$60,000	6.0%
Sub - Total			96,100	73,600	73,600	\$243,300	
Balance remaining to be divided up amongst:			238,900	261,400	261,400	\$761,700	
* Area C (Gas Tax)	5,967	50%	129,269	143,799	143,799	\$416,866	38.6%
* Area D (Gas Tax) (Fixed)	1,678	14%	25,000	25,000	25,000	\$75,000	7.5%
* Area F (Gas Tax)	4,194	35%	84,631	92,602	92,602	\$269,834	25.3%
	<u>11,839</u>	<u>100%</u>					
Total Allocations			<u>335,000</u>	<u>335,000</u>	<u>335,000</u>	<u>1,005,000</u>	<u>100.0%</u>

* Percentage of Remaining Cost calculated on 2010 # of Residential Parcels





Water Quality Map - Interactive and on-Line

Shuswap Lake Off Encounter Pt

Shuswap Lake Off Encounter Pt	
Monitoring_Type	General Lake Water Quality
Project_Name	Deep Station Monitoring MoE
Site_Name	Shuswap Lake Off Encounter Pt
Latitude	51.117222
Longitude	-118.983333
Sample_Location_Types	Mid Lakes
Study_Objective	General Lake Nutrient Conditions
Sampling_Agency	MoE - Kamloops
Sample_Depth	1-160m
Sampling_Period	Year-round
Sampling_frequency	monthly, 2x in winter
Sampled_Parameters	Lake profiles, Nutrients, turbidity, Chl. a, algae taxonomy, zooplankton biomass.

Directions Search nearby more ▾

Legend

- Near Shore Water Quality monitoring sites
- General Lake Water Quality monitoring sites
- Watershed monitoring sites
- Special Studies monitoring sites

[View Larger Map](#)

Recreation Management Annual Summary



Education, Compliance and Enforcement Annual Summary



The first priority is outreach and education, followed by compliance promotion and finally enforcement, when necessary





Working together to sustain our watershed



Welcome to SLIPP

Shuswap Lake Integrated Planning Process

The Shuswap Lake Integrated Planning Process (SLIPP) brings together communities, First Nations, and public agencies to ensure that the Shuswap watershed remains a great place to live, work, and play. SLIPP was launched in response to intense pressures from increased development, pollution entering the lakes, and conflicting demands on recreation resources. Working in partnership on innovative approaches and projects, SLIPP aims to increase public safety on the lakes, ensure a healthy lake, and create an environment where a diversity of recreational experiences and economic opportunities can be enjoyed by all.

In early 2011, local governments pledged \$1 million to a SLIPP pilot project, including a three-year commitment from the CSRD and TNRD, and a one-year commitment from the City of Salmon Arm and District of Sicamous. This funding is in addition to ongoing project and in-kind funding from SLIPP agency partners.

SLIPP's vision is *Working together to sustain the health and prosperity of Shuswap and Mara Lakes*. It has three goals that it works toward:

- Development that respects the environment as well as economic and social interests
- Water quality that supports public and environmental health
- Desirable recreation experiences that are safe and sustainable

To know more about SLIPP, click on the [About](#) tab.

SLIPP Project Updates

NEW! Water Quality Monitoring Map for Shuswap and Mara Lakes

SLIPP partners have created an online, interactive [Water Quality Monitoring Map](#). Check it out to see what is being monitored at various locations around the Shuswap watershed!

Stay tuned - In the near future, SLIPP partners will also be posting links to water quality test results.

Notice of all-committee meeting

There will be an all-committee meeting on Thursday, April 12th. Please RSVP to info@slippbc.ca.

Click [here](#) for more information. See you there!

Planning a project near Shuswap shorelines?

- Follow these three steps:
1. Contact your local government and [FrontCounter BC](#) before you begin - regulations and bylaws may apply
 2. Consult a Qualified Environmental Professional

Observe a violation?
Report it to the
RAPP Line





Boat Greywater ON SHUSWAP AND MARA LAKES

Our lakes give us drinking water, recreation and are a crucial part of our economy. As boaters, we can support the lakes by reducing the impacts of greywater — the wastewater from on-board sinks, showers or washers and from boat maintenance activities.

Artwork provided by Celebrate the Shuswap poster contest winners. shuswapwatershed.ca

The Shuswap Lake Integrated Planning Process (SLIPP) brings together communities, First Nations and public agencies to make the Shuswap watershed a great place to live, work and play. Working in partnership on innovative approaches and projects, SLIPP aims to increase public safety on the water, ensure a healthy lake and create an environment where a diversity of recreational experiences and economic opportunities can be enjoyed by all.

For more information about boat greywater in the Shuswap area, visit slippbc.com

What's the problem with dumping greywater from boats?

Greywater contains bacteria, viruses and chemicals that can pose a threat to human health and the lakes. These materials wash off our bodies, food and clothing and are contained in the cleaning and cosmetic products we use. Although it may seem harmless, with contaminants like phosphate, chlorine, salts, metals, and endocrine disruptors, this soapy water can pollute ecosystems. Because many boats are not equipped with holding tanks, greywater flows untreated from sinks and showers into our local watershed.

What can boaters do to reduce greywater impacts?

Be aware — know your plumbing and how wastes are stored or discharged

- If you have greywater tanks, use available pump-out facilities to dispose of waste rather than dump to the lake.
- Seal off, remove or otherwise prevent the use of heads, galleys, sinks, showers, etc. where holding tanks are not possible, or where pump-out facilities are not available.
- Many boats can be retrofitted to include a greywater holding tank or to route greywater to the toilet waste holding tank.

Use shore-side facilities

- For shorter day trips, bring your dirty dishes home to wash.
- When possible, take showers on land.
- Serve your laundry to do after the holidays.

Use onboard facilities with care

- Shower and wash dishes when well away from the shoreline and bays, avoiding residences, beaches and areas where people could be using the water to drink, swim, wakeboard, etc.

Use phosphate-free & non-toxic soaps

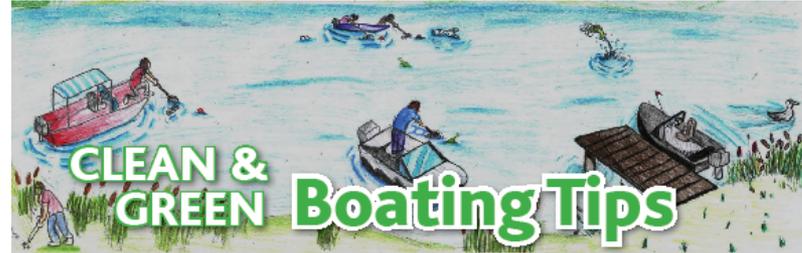
- Check product labels and avoid cleaners that advise "do not get in eyes" or "always wear gloves;" these products are more likely to harm you and the environment.

Use alternative cleaners

- Baking soda, lemon juice, and vinegar can perform as well as commercial products without harmful by-products.

Use less product

- A little cleaner can go a long way, especially when combined with a bit of elbow grease. Wash decks and hulls frequently with fresh water to avoid the use of harsh, corrosive cleaners.



CLEAN & GREEN Boating Tips

Clean and green boating is a way we can ensure that our lakes remain a great place to live, work and play.

Artwork provided by Celebrate the Shuswap poster contest winners. shuswapwatershed.ca

1. **Prevent oily discharge from the bilge:** Keep your engine well tuned to prevent fuel and oil leaks. Place oil absorbent pads where drips may occur and in your bilge. Check the pads often and dispose of them at your marina or waste collection center.
2. **Spill-proof your oil changes:** Use an oil change pump to transfer oil to a spill proof container. Wrap a plastic bag or absorbent pad around the oil filter to prevent oil spills.
3. **Spill-proof fuelling practices:** Fill fuel tanks slowly and carefully and use absorbent pads or rags to catch drips and spills. Don't "top off" or overflow your fuel tank and leave 5% empty to allow fuel to expand as it warms.
4. **Don't add soap:** Using soap to disperse fuel and oil spills will harm water quality even more.
5. **Minimize boat cleaning and maintenance in the water:** If possible save maintenance projects for the boatyard. When performing work on the water minimize your impact by containing waste using tarps and vacuum sanders, and collect all drips and debris for proper disposal.
6. **Stow it, do not throw it!** Keep your trash on board. Never throw cigarette butts, fishing line, or any other garbage into the water. Take advantage of shore-side facilities to recycle.
7. **Reduce toxic discharges from bottom paints:** Use hard, less toxic, or nontoxic antifouling paints and follow non-abrasive underwater hull cleaning techniques to prevent excessive paint discharge. Dry storage reduces the need for antifouling paints and saves money.
8. **Dispose of hazardous waste properly:** Recycle or dispose of batteries, antifreeze, cleaning products, oil, oil filters and other hazardous wastes at a hazardous waste collection facility or event. Call the BC Recycling Hotline at 1-800-667-4321, go to productcare.org or ask your marina for a location.
9. **Plan ahead to manage toilet wastes properly:** Check with the marina for locations of pump-out facilities. If you don't have an installed toilet use a port-a-potty and empty it at pump out station or shore-side bathroom.
10. **Reduce your impact and limit greywater discharges:** Check out the suggestions on the other side of this page.

For more information about clean and green boating, visit slippbc.com