

This brochure was developed for the Sitka construction trade, developers, and homeowners. Its purpose is to educate Sitkans on stormwater issues and help them control and reduce stormwater pollution. It gives tips on good management practices. References are included for more detailed information.

### ***What is stormwater? Why is it a problem?***

Stormwater is water from rain and melting snow that flows across exposed soils, construction sites, grasses and pavement. Runoff drains to ditches and storm drains that route it to creeks, lakes and marine waters. Stormwater carries sediment, oil, bacteria, road runoff and other pollutants. Runoff can clog culverts, destroy habitat and reduced oxygen for fish, and be toxic to aquatic life.

Stormwater runoff is our most common cause of water pollution and is a challenge to control. In Sitka, considerable rainwater and snowmelt runs off streets, parking lots, lawns and construction sites to waterbodies. For example, Swan Lake has over 20 stormwater outfalls emptying into the lake.

Land clearing and construction activities are important sources of stormwater pollutants, particularly sediment. Chemicals and materials used in construction can wash into Sitka's waterways. Concrete truck washouts and oil and grease from fuel containers and equipment are examples. Soil that erodes from construction sites contributes to sediment pollution. Vehicles drip fluids on paved areas where stormwater carries them to ditches or storm drains and into creeks and the lake. Excessive pet wastes left on the ground also can contribute unhealthy levels of bacteria and parasites to waterways.

Several other activities – many that seem harmless – contribute to stormwater pollution. These include:

- Removal of streamside and lakeshore vegetation
- Improperly placed fills that erode sediments and degrade streams, wetlands and water quality
- Modifications to natural drainage without proper planning and structural controls
- Sediment and nutrient introduction from snow and road maintenance, bank sloughing and erosion
- Dumping wastes into storm drains

Common household products that pollute if dumped down storm drains include ammonia-based cleaners, phosphates, car care products, paint, thinners and cleaning solvents, wood or concrete sealants, degreasers, antifreeze, motor oils, and chlorine bleaches.

### ***How is stormwater runoff regulated? Do I need a permit?***

Construction activities that cause stormwater runoff are regulated through federal and state permits. Typical activities include lot clearing, grading, excavation road and bridge building. Beginning July 1, 2003, residential, commercial or industrial construction activities disturbing one (1) or more acres in Sitka are required to apply for permit coverage under a Construction General NPDES Permit with both the Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC). Contractors must prepare a site-specific stormwater pollution prevention plan to control and treat stormwater pollution from the work site. The plan must include erosion, sediment and pollution controls to be used, periodic inspections, and maintaining best management practices (BMPs) through the life of the project. Detailed information on EPA permit requirements can be found at <http://www.epa.gov/npdes/stormwater.cgp> or by calling (206) 553-6919 or toll-free at 1-800-424-4372.

For construction clearing and homeowner activities affecting less than one (1) acre of land, no federal or state stormwater permits are required, but local building permits are required. For these activities, BMPs are used to reduce polluted runoff.



### ***Simple things you can do to reduce stormwater pollution***

#### For construction contractors and developers:

- Apply for local building and/or grading permits and, where construction disturbs more than one acre, apply for a federal Construction General Permit and prepare your stormwater pollution prevention plan.
- Install erosion and sediment controls before clearing and grading begins.
- Place silt fencing around soil erosion sites and areas where runoff consolidates to contain sediment runoff. Regularly inspect and maintain fencing to ensure no breaching or failure occurs.
- Clear areas in sequence to reduce the area of exposed soils.
- Retain natural vegetated features to absorb stormwater runoff. Divert runoff away from paved surfaces and exposed soils to grasses or vegetated areas. Plants and grass slow down runoff, absorb water and remove sediments

and other pollutants before they reach creeks and ditches.

- Use terracing to reduce runoff velocity on steep slopes; cover dirt piles to reduce erosion.
- Reduce soil damage from heavy equipment with plating or wood supports.
- Use commercial jute matting, hydromulch, straw or hay to help stabilize exposed soils until vegetation is established.
- Protect trees, shrubs and grasses growing along steep areas, and around bodies of water. These are excellent buffers for erosion control.
- For larger construction sites, divert sediment runoff away from waterbodies to collection ditches and detention basins and/or grassy swale for further treatment.
- Properly store fuel and other chemicals away from waterbodies and maintain a clean construction site.
- Dispose of used chemicals at the CBS waste disposal site. Waste oil to the harbor; paints and hazardous wastes to the semi-annual collection events. Paints can also go to the Sawmill Cove Recycling Center year-round.

For citizens and homeowners:

- Compost your yard waste. Don't dispose of it in the ditch or over the bank.
- Dispose of your oils, antifreeze, paints, and other chemicals at approved municipal waste disposal sites.
- Sweep up dirt in driveways, sidewalks and roads rather than washing it into waterways.
- Protect trees and shrubs near creek banks and lakes. They're natural buffers.
- Check your aboveground home heating oil tanks and lines for leaks and smells.
- Store oil and other chemicals outside the creek and lake special management areas.

***Just do it!***

Construction contractors and citizens play a big part in keeping watersheds clean and healthy.

**Things to Remember!**

- Before you begin clearing land, apply for your stormwater permit and complete your pollution prevention plan
- Reduce sediment erosion through good management practices
- Leave vegetation in place near streams and ditches to filter out pollutants
- Check cars and oil tanks for leaks
- Never dump anything down storm drains

For more information, call:

- ☎ Brian Bergman, Public Works Maintenance Supervisor, 747-3987
- ☎ Mark Buggins, CBS Env. Supt., 966-2256
- ☎ Marlene Campbell, CBS Special Projects Coordinator, 747-1855
- ☎ Scott Brylinsky, Building Official, 747-1807

Useful references for more information:

1. *Stormwater Control Strategy and Action Plan for the Swan Lake Watershed.* City and Borough of Sitka. June 2002.
2. Stormwater Outreach Materials and Reference Documents of Environmental Protection Agency <http://cfpub.epa.gov/npdes/stormwatermonth.cfm>
3. EPA Region 10 website at [www.epa.gov/r10earth/stomrwater.htm](http://www.epa.gov/r10earth/stomrwater.htm) for construction permit requirements, BMPS and guidance for preparing stormwater pollution prevention plans.

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**A CONTRACTOR AND  
CITIZEN GUIDE TO  
REDUCING STORMWATER  
POLLUTION**

*“When it rains, it drains”*



**City and Borough of Sitka**  
100 Lincoln Street  
Sitka, Alaska 99835



June 2004

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