## Keep it clean! Mat-Su Stormwater Car, Boat & **Business & Volunteers & Home Owners** Cities Home **Developers OHV Owners** Industry Organizations

**Scenic and Rural** 

Character

Caring about stormwater is earing about our way of life:



Rain &

Snowmelt

Y

## When it Rains, it Drains

**Plentiful Fish** 

**Stocks** 



**Clean Drinking** 

Water

Lawns, ditches, asphalt, streets

Streams, lakes & groundwater

=

Water Quality



Rain and melting snow flow across surfaces like lawns and pavement, picking up silt, oil, chemicals, and debris. Sooner or later all this can flow into rivers, lakes, and even groundwater and aquifers.

## **Urbanization & Stormwater**

Today the Mat-Su region generally enjoys clean water. Yet with our strong population growth and increased urbanization, this generally acceptable condition could change. For example, both Lake Lucille and Cottonwood Creek have been added to EPA's list of "impaired water bodies," citing urban run-off as the issue.

Pollution from everyday activities, over time, accumulates in waterbodies. Maintaining our water quality requires that everyone help prevent pollution. The top stormwater concerns in Mat-Su include:



Silt. sediment & debris



Septic failure & fertilizer over-use



 $\checkmark$ 

Everyday cleaners, oil, & chemicals



Wildlife

Clean water is everybody's business, because everyday actions make a difference. Do your part:

Appreciate clean water: drink from  $\overline{\checkmark}$ the tap; go fishing; hunt; view and photograph wildlife; enjoy our many pure water lakes and streams; etc.

 $\overline{\mathbf{V}}$ Check out all the tips on this website so you know how to help keep our watersheds healthy.

Support waterway clean-up efforts.

Participate in the Mat-Su Borough Stormwater Management Plan.



Disruption of natural drainage patterns



Groundwater

Recharge

& Flood Control

Asphalt & surfacing that prevents natural filtering





Soap, scum, and oily water can drain from your yard into our lakes, streams, and coastal waters. How do you avoid this mess? Easy. Wash you car on gravel which can help filter the water, or take it to a car wash where the water gets treated and recycled.



Leaking oil goes from car to street. And is washed from the street into ditches, stormdrains, culverts and into our lakes, creeks, and coastal waters. Now imagine the number of cars in the area and you can imagine the amount of oil that finds its way from leaky gaskets into our water. So please, fix oil leaks.



# WHEN YOU FUEL YOUR BOAT,

REMEMBER

YOU MAY NOT JUST BE

FUELING YOUR BOAT.

An oil sheen on the water is bad news. A little spilled fuel can go a long way and harm salmon and other aquatic life. Make sure fuel goes only into your tank—not into the water. Don't leave a sheen. Prevent drips, spills and overfills.



## WHEN YOU'RE RIDING,

### REMEMBER

## YOU'RE NOT JUST

RIDING.

Riding is fun. Riding in mud is ultra fun. But when mud is stirred up in streams, it hurts fish gills, eggs, and larvae. So avoid riding where fish are swimming and spawning. The fish—and everyone who likes to catch them—will thank you.



A failed septic system is bad news for more than your pocketbook. Runoff can carry untreated sewage off site and into our lakes and waters. Regular upkeep can keep your system working as it should. Your home septic system. Check it, fix it, maintain it.



WHEN YOU'RE FERTILIZING THE LAWN REMEMBER, YOU'RE NOT JUST FERTILIZING THE LAWN.

You fertilize the lawn. Then it rains. The rain washes the fertilizer into our lakes, streams, and into coastal waters. This causes algae to grow, which uses up oxygen fish need to survive. If you fertilize, please follow directions and use sparingly. Or even better, keep lawns back from the shoreline, and retain a native vegetation buffer.

WHEN YOU DUMP AN APPLIANCE, REMEMBER YOU'RE NOT JUST DUMPING AN APPLIANCE.

Dumping appliances, autos, and garbage isn't cool. Next time you visit a lake, or drink

tap water remember: what ends up on the ground ends up in our water.

## Additional Resources for Homeowners:

- How to maintain your septic system
- Great tools for landsaping
  - Natural buffers
  - Rain gardens
  - Careful fertilizer use
- To learn how to properly dispose of appliances and other household items, visit: http://www.matsugov.us/publicworks/faq





Leaky gaskets. Hydrolic fluid drips. Fueling spills. Don't shortchange our water quality just because the construction season is short. Take the time to do regular maintenance, fuel a safe distance from waterbodies, and use oil absorbent mats to catch leaks. Your kids and grand kids will thank you.



You construct a new road or development. Silt from earth work can be carried off-site by rain into creeks and lakes, which makes it hard for salmon to breathe. When you do construction, leave natural vegetation buffers along streams, and include settling basins. The salmon will thank you.



Subdivisions change natural drainage patterns. Plan adequate capacity to address rainfall and snowmelt on-site: "slow it down, spread it out, and soak it up." Poor drainage can lead to flooding, unexpected costs, non-acceptance of private roads by the Borough, and poor curb appeal. Remember, when it rains, it drains.

# Additional Resources for Developers:

- Developing a Stormwater Pollution Prevention Plan
- Stormwater permit requirements for projects:
  - Draining into U.S. waters
  - With a disturbance area of greater than one acre
- Spill response toolkit and training materials



# Mat-Su Stormwater

Home

Car, Boat & OHV Owners

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Home Owners

Developers

Business & Industry

Cities

Keep it clean!

Volunteers & Organizations

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> ONLY RAIN DOWN THE DRAIN



### Keep dirt and grime from washing into storm drains.

When it rains, runoff from your roof and parking area can pick up harmful chemicals – from dirt swept from work areas or materials leaking from a dumpster. Almost none of the runoff is treated before it flows into our streams, rivers, lakes, and Cook Inlet.

Help ensure that only rain goes down the drain. Follow these best business practices to keep your business and our waters healthy:

### **FIND**

- Find your storm drains and mark them.
- Keep waste and debris out of storm drains on your property.
- Prevent wash water from going into storm drains.
- Keep waste and debris out of the street drain, too.

### **COVER**

- Keep hazardous materials in closed, sturdy containers with labels.
- Place containers indoors or under cover.
- Keep dumpster lids closed.

#### MAINTAIN

- Promptly repair all leaking connections, pipes, hoses, and valves.
- Have your oil/water separator or catch basin cleaned regularly by a professional.

#### PREPARE

- Put drip pans where spills/leaks are most likely.
- Clearly label every container.
- Have a spill kit on site and train your workers how to use it.
- Use the least toxic material to get the job done.

### **CLEAN**

- Clean up spills immediately.
- Inside: sweep up debris and dispose of properly. Don't sweep it outdoors or wash it into a storm drain.
- Outside: Sweep and pick up debris on paved areas around your business especially before heavy rains.
- Keep hazardous materials out of your dumpster. For more info visit http://www.matsugov.us/publicworks/household-hazardous-waste or contact the Mat-Su Solid Waste Division at (907) 746-2841.
- To find out if something can be recycled, visit http://www. valleyrecycling.org/ or call (907) 745-5544.

# Additional Resources for Businesses & Industry:

- Oil and chemical spill kits
- Permit requirements for water discharges
- Map of US waters



• EPA Factsheets and Publications (hyperlink to website below)

http://cfpub1.epa.gov/npdes/docs.cfm?document\_ type\_id=3&view=Fact%20Sheets%20and%20 Outreach%20Materials&program\_id=6&sort=name

# Mat-Su Stormwater

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## **Municipal Stormwater**

When communities reach a certain population and density threshold, municipal governments are required to address stormwater by law. Because of health, safety, and cost issues associated with water quality, as communities become more urbanized, their storm water discharges fall under the Clean Water Act of 1972, as amended in 1987. Once a community meets a population threshold, an Alaska Pollutant Discharge Elimination System (APDES) permit is required to outline how a community must work together to keep pollutants out of their stormwater and environment.

Although Wasilla and Palmer are not yet at these thresholds, the recent census data could push them over the edge, creating new federal requirements. However, both communities are already looking at creative ways to both treat their stormwater and to reduce infrastructure lifecycle costs by using best practices and low impact technologies. Some examples from each community are listed below.

# Wasilla 🛫 City of Lakes

Frontlines of urbanization - Impaired water bodies

## Good efforts underway



Urban stormwater and water quality issues are beginning to be a concern in Wasilla.



Downtown Wasilla Storm Drain



Iditapark LID Stormwater System

Palmer 🛫 Matanuska River

Challenges of drainage in flatlands . . . . Drain to the river.







Stormwater from Palmer flows to the Matanuska River and Cook Inlet.





## **Sunshine Creek Restoration Project**

# Mat-Su Stormwater

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# Matanuska-Susitna Borough Stormwater Management Plan





### **Planning for Clean Water**

Stormwater Management Plans are "clean water toolboxes" that have been used in communities across the U.S. both to help maintain water quality, and to determine

locally how to best meet federal and state regulatory water quality requirements triggered by population growth.

In the 2010 U.S. census, the Mat-Su Borough passed EPA's population threshold of 50,000. Because of the health, safety, and cost issues associated with water quality, as communities become more populated and urbanized, their storm water discharges fall under the Clean Water Act of 1972, as amended in 1987. Once a community meets a population threshold, an Alaska Pollutant Discharge Elimination System (APDES) permit is required to outline how a community must work together to keep pollutants out of their stormwater and environment.



### Wasilla Based Project Team

The need to enhance and regulate stormwater in the Mat-Valley's core area is an issue on the immediate horizon. Anticipating this need, the Borough sought EPA funds to

develop a Stormwater Management Plan (SMP). Through a West Coast Estuaries Initiative Grant, Wasilla-based USKH has been contracted to lead the SMP effort. Based on their stormwater work in the region, and SMP planning work in Fairbanks, USKH seeks to take advantage of the time before regulations become law, develop a usable toolbox, and set the stage for streamlined and locally-tailored permitting in the future.

### Timeline

Fall 2011 the SMP planning process will begin and will involve the public and key stakeholders, such as the City of Wasilla, other communities, groups, developers, and affected interests within the Borough. A final plan is anticipated in late 2012.

### **Project Benefits**

Many community goals can be supported by enhanced stormwater management:

- Clean drinking water;
- Plentiful fish stocks;
- Preservation of scenic and natural qualities;
- Flood control; and

## **Participate!**

We welcome your input and participation in this important regional effort. Please check back periodically as we add information and documents in this box on the project and its' progress. To provide input, or learn how you can be involved, please contact:

USKH Project Team Sara Wilson Doyle, SMP Public Involvement (907) 376-7815 swdoyle "at" uskh.com

Matanuska Susitna Borough C. Peter Curtis, P.E., MSB Public Works Dept. (907) 745-9813 Peter.Curtis "at" matsugov.us

MSB Stormwater Website: http://www.matsugov. us/publicworks/projects/ stormwater-management

## **SMP Current:**

Stormwater Advisory Committee Meetings (SACM)

Times & Locations:

• TBA • TBA

Participation Procedure: At the end of each meeting attendees will have 3-minutes to provide feedback and ask questions.

SMP Archive: (most recent on top)

**SMP Meeting Minutes** 

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• Water quality.

We appreciate your taking the time to explore this website, read project documents, attend meetings, and provide feedback. Stormwater water is everyone's concern, so keep it clean!

#### <u>SMP Documents</u>

- Project Fact Sheet
- Public Involvement Plan





